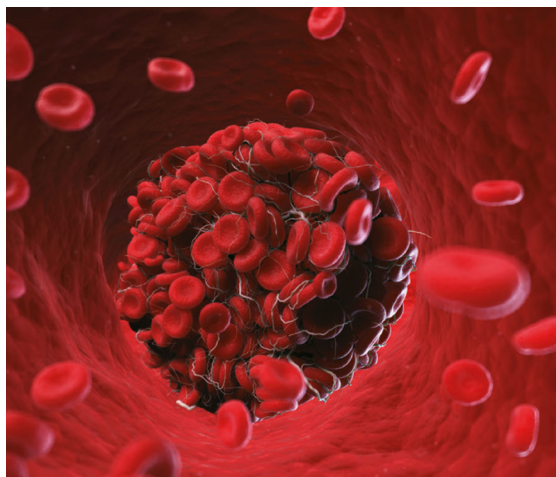


PRODUCTS & SERVICES

- HUMAN ANTIGENS & SEROLOGY ANTIGENS
- ENZYMES
- SERUM & PLASMA
- ANTIBODIES
- ANTIBODY DEVELOPMENT
- GOLD NANOPARTICLES & CONJUGATES
- SURFACE MODIFICATION & LABELLING
- LATERAL FLOW ASSAY DEVELOPMENT & MANUFACTURE
- IMMUNOAFFINITY COLUMNS
- BLOCKERS, STABILIZERS & SUBSTRATES



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- Cardiac
- Hormones
- Immunoglobulins
- Infectious Disease Nutritional
- Plasma Proteins
- Renal and Liver markers
- Cell Culture additives
- 05 Custom Development and Manufacture of Antigens

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52 IMMUNOAFFINITY COLUMNS (IAC)

- 52 – Mycotoxins
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- Antibiotics
- 55 – Antibodies for IACs
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56 STABILIZERS/BLOCKERS/DILUENTS

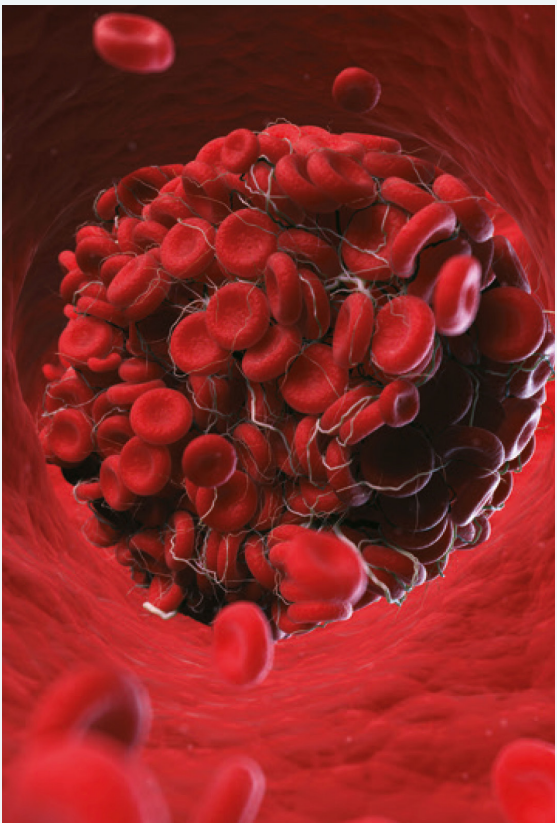
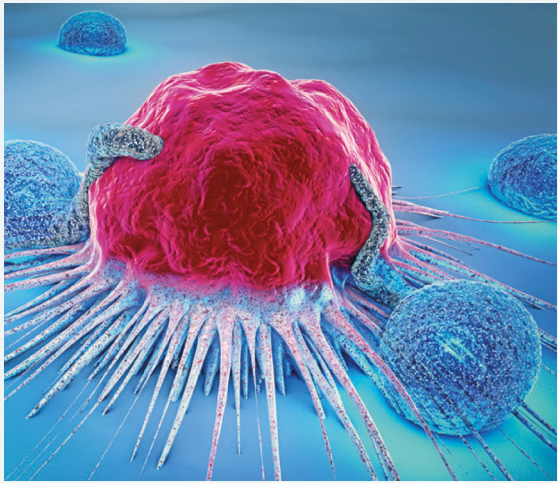
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- Novarum
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HUMAN ANTIGENS

Disease Area	Product Name	Prod. Code (Pure)	Prod. Code (Part-pure)
Autoimmune / Inflammation	(α) alpha -1 - antichymotrypsin (ACT)	P159-5	
	(α) alpha -1 - antitrypsin (A1AT)	P165-5	
	(β) Beta-2-glycoprotein-1 (B2GP1)	P195-5	
	C-reactive protein (CRP)	P100-7N	
	Procalcitonin (PCT) (recombinant)	P742-1	
	Thyroglobulin (Tg)	P128-1	
	Thyroglobulin (Tg)	P128-0	
Cancer / Tumour	Alpha fetoprotein (AFP)	P109-3	
	Beta 2-microglobulin (β2M)	P122-1	P122-2
	CA125		P251-4
	CA15-3		P301-4
	CA19-9		P291-4
	Carcinoembryonic antigen (CEA)	P824-3	
	CYFRA 21-1		P246-4
	Neuron specific enolase (NSE)	P147-3	
	Prostate-specific antigen (PSA)	P117-7	P117-8
	Prostatic Acid Phosphatase	P116-1	
	PSA-ACT complex	P192-3	P192-9
Cardiac	Creatine kinase MM (CK-MM)		P189-9
	D-Dimer	P202-3	P202-4
	Galectin 3 (Gal-3) (recombinant)	P734-1	
	HbA1c Reagents for Boronate Aff & Immuno <3.5% low level	PS186-0	
	High-density lipoprotein (HDL)		P233-8
	Low-density lipoprotein (LDL)		P232-8
	Myoglobin (MYO)	P136-3	
	N-terminal prohormone brain natriuretic peptide (NT-Pro BNP)	P305-1	
	Triglyceride Concentrate	P235-8	
	Troponin complex (cTn)		P184-4
	Troponin I recombinant	P725-3	
	Troponin T recombinant	P724-3	
Hormones	Human chorionic gonadotropin (hCG)	P111-0	P111-6
	Prolactin	P700-1	
	Sex hormone-binding globulin (SHBG)	P145-5	P145-4
Immunoglobulins	IgA	P143-3	
	IgG	P142-1	
	IgM	P141-5	
Infectious Disease	HIVp24	P714-3	
	Albumin (ALB)	P140-0	
Nutritional	Ferritin	P103-7	
	HbA1c	PS186-9	P186-0B
	Prealbumin (Prealb)	P171-1	P171-2
	Transferrin receptor (TfR)		P185-9

HUMAN ANTIGENS

Disease Area	Product Name	Prod. Code (Pure)	Prod. Code (Part-pure)
Plasma Proteins	Albumin	P714-3	
	Complement C4c	P151-0	P151-8
	Complement C1q	P102-1	
	Thyroxine binding globulin (TBG)	P125-1	P125-2
Renal and Liver markers	Cystatin C (CysC)	P175-1	
	Cystatin C (recombinant)	P713-1	
	Lipocalin (NGAL) (recombinant)	P722-1	
	Retinol binding protein (RBP)	P124-1	
	α 1-microglobulin (α1M)	P121-1	
Cell Culture additives	Alpha 1 microglobulin (heat treated)	P121-9E	
	Apo Transferrin	T100-5	
	Holo Transferrin	T101-5	

CUSTOM DEVELOPMENT & MANUFACTURE OF ANTIGENS

Our custom antigen development service, takes recombinant or native antigens from initial feasibility right through to verification.

If you can't find the antigens you are looking for, contact us today and we will do our best to provide a custom solution.



FEASIBILITY

- Recombinant**
- + Screening of gene databases
 - + *E. coli* & *Pichia*
 - + Cloning
 - + Transformation
 - + Small scale fermentation

- Native**
- + Sourcing of raw materials of human origin
 - + Small scale extraction and purification

OPTIMISATION

- Recombinant**
- + Optimised growth conditions
 - + Formulation
 - + Downstream processing
 - + Purification
 - + Fermentation capacity of 30L per batch

- Native**
- + Large scale extraction
 - + Downstream processing purification

VERIFICATION

- Native & Recombinant**
- + HPLC
 - + Western blot
 - + Protein electrophoresis
 - + IEF Gels
 - + Commercial autoanalysers
 - + Stability trials
 - + Validation

Discuss your requirements with our technical team on +44 (0)1495 363 000 or email sales@bbisolutions.com

SEROLOGY ANTIGENS

DIARECT is one of the leading suppliers of recombinant and native antigens for autoimmune diagnostics, infectious disease serology, and allergy testing. Providing customers with products and services of constantly high quality is our philosophy. Therefore, all products are developed, produced and distributed according to a Quality Management System that is certified for compliance with EN ISO 13485 standards.

In addition, since September 2002 DIARECT has been listed as a manufacturer of multiple antigens in the database of the U.S. Food and Drug Administration (FDA).

AUTOIMMUNE DISEASE



Systemic Autoimmune Rheumatic Diseases

30300	0.1mg	DFS70
30301	1.0mg	
		Human recombinant
		Expressed in insect cells

Mixed Connective Tissue Disease / SLE

13000	0.1mg	U1-snRNP 68/70 kDa	13200	0.1mg	U1-snRNP C
13001	1.0mg		13201	1.0mg	
		Human recombinant			Human recombinant
		Expressed in <i>E. coli</i>			Expressed in insect cells
13100	0.1mg	U1-snRNP A	13300	0.1mg	U-snRNP B/B'
13101	1.0mg		13301	1.0mg	
		Human recombinant			Human recombinant
		Expressed in insect cells			Expressed in insect cells

Systemic Lupus Erythematosus (SLE)

17500	0.1mg	Sm	12300	0.1mg	dsDNA (plasmid)
17501	1.0mg	(non recombinant; bovine)	12301	1.0mg	
		Non recombinant			Plasmid
		Bovine			Expressed in <i>E. coli</i>
11600	0.1mg	RNP/Sm	14100	0.1mg	Ribosomal
11601	1.0mg	(non recombinant; bovine)	14101	1.0mg	Phosphoprotein P0
		Non recombinant			Human recombinant
		Bovine			Expressed in insect cells
11700	0.1mg	SmD	14200	0.1mg	Ribosomal
11701	1.0mg		14201	1.0mg	Phosphoprotein P1
		Human recombinant			Human recombinant
		Expressed in insect cells			Expressed in insect cells
11800	0.1mg	SmD1	14300	0.1mg	Ribosomal
11801	1.0mg		14301	1.0mg	Phosphoprotein P2
		Human recombinant			Human recombinant
		Expressed in insect cells			Expressed in <i>E. coli</i>
11900	0.1mg	SmD2	15400	0.1mg	Proliferating Cell Nuclear Antigen
11901	1.0mg		15401	1.0mg	(PCNA)
		Human recombinant			Human recombinant
		Expressed in insect cells			Expressed in insect cells
12000	0.1mg	SmD3	17300	0.1mg	Ku (p70/p80)
12001	1.0mg		17301	1.0mg	
		Human recombinant			Human recombinant
		Expressed in insect cells			Expressed in insect cells
31100	0.1mg	Histone	19700	0.1mg	Nucleolin
31101	1.0mg	(non recombinant; bovine)	19701	1.0mg	
		Non recombinant			Human recombinant
		Bovine			Expressed in insect cells
31000	0.1mg	Nucleosome			
31001	1.0mg	(non recombinant; bovine)			
		Non recombinant			
		Bovine			

SEROLOGY ANTIGENS
AUTOIMMUNE DISEASE

Sjögren’s Syndrome / SLE

17400	0.1mg	Ro/SS-A (60 kDa; recombinant)
17401	1.0mg	
		Human recombinant
		Expressed in <i>E. coli</i>
15500	0.1mg	Ro/SS-A (60 kDa; non recombinant; bovine)
15501	1.0mg	
		Non recombinant
		Bovine

12500	0.1mg	Centromere Protein B (CENP-B)
12501	1.0mg	
		Human recombinant
		Expressed in insect cells

16900	0.1mg	Centromere Protein A (CENP-A)
16901	1.0mg	
		Human recombinant
		Expressed in insect cells

12400	0.1mg	DNA Topoisomerase I (Scl-70; full length)
12401	1.0mg	
		Human recombinant
		Expressed in insect cells

14500	0.1mg	DNA Topoisomerase I (Scl-70; truncated)
14501	1.0mg	
		Human recombinant
		Expressed in insect cells

12700	0.1mg	Ro/SS-A (52 kDa)
12701	1.0mg	
		Human recombinant
		Expressed in insect cells
12800	0.1mg	La/SS-B
12801	1.0mg	
		Human recombinant
		Expressed in insect cells

11500	0.1mg	DNA Topoisomerase I (Scl-70; non recombinant; bovine)
11501	1.0mg	
		Non recombinant
		Bovine

16000	0.1mg	PM/Scl 100
16001	1.0mg	
		Human recombinant
		Expressed in insect cells

17000	0.1mg	PM/Scl 75
17001	1.0mg	
		Human recombinant
		Expressed in insect cells

Myositis

12900	0.1mg	Histidyl-tRNA Synthetase (Jo-1)
52001	1.0mg	
		Human recombinant
		Expressed in insect cells

15600	0.1mg	Threonyl-tRNA Synthetase (PL-7)
15601	1.0mg	
		Human recombinant
		Expressed in insect cells

15700	0.1mg	Alanyl-tRNA Synthetase (PL-12)
15701	1.0mg	
		Human recombinant
		Expressed in insect cells

11100	0.1mg	Glycyl-tRNA Synthetase (EJ)
11101	1.0mg	
		Human recombinant
		Expressed in insect cells

30100	0.1mg	Asparaginyl-tRNA Synthetase (KS)
30101	1.0mg	
		Human recombinant
		Expressed in insect cells

18400	0.1mg	SRP54
18401	1.0mg	
		Human recombinant
		Expressed in insect cells

3000	0.1mg	MDA5
30001	1.0mg	
		Human recombinant
		Expressed in insect cells

Autoimmune Thyroid Diseases

12100	0.1mg	Thyroid Peroxidase (TPO)
12101	1.0mg	
		Human recombinant
		Expressed in insect cells

16000	0.1mg	PM/Scl 100
16001	1.0mg	
		Human recombinant
		Expressed in insect cells

17000	0.1mg	PM/Scl 75
17001	1.0mg	
		Human recombinant
		Expressed in insect cells

18100	0.1mg	Mi-2
18101	1.0mg	
		Human recombinant
		Expressed in insect cells

11000	0.1mg	TIF1 gamma
11001	1.0mg	
		Human recombinant
		Expressed in insect cells

31700	0.1mg	NXP2
31701	1.0mg	
		Human recombinant
		Expressed in insect cells

31600	0.1mg	SAE1/SAE2
31601	1.0mg	
		Human recombinant
		Expressed in insect cells

12200	0.1mg	Thyroglobulin (non recombinant)
12201	1.0mg	
		Non recombinant
		Human

SEROLOGY ANTIGENS
AUTOIMMUNE DISEASE

Celiac Disease

15200	0.1mg	Tissue Transglutaminase (tTG; expressed in Baculovirus/Sf9)	19500	0.1mg	Gliadin (recombinant; deamidated)
15201	1.0mg	Human recombinant	19501	1.0mg	Recombinant, deamidated
		Expressed in insect cells			Expressed in <i>E. coli</i>
14400	0.1mg	Tissue Transglutaminase (tTG; expressed in <i>E. coli</i>)	31500	0.1mg	Gliadin (non recombinant)
14401	1.0mg	Human recombinant	31501	1.0mg	Non recombinant
		Expressed in <i>E. coli</i>			Wheat

Autoimmune Liver Diseases

31800	0.1mg	Cytochrome P450 2D6 (LKM 1; ng)	17800	0.1mg	OGDC-E2
31801	1.0mg	Human recombinant	17801	1.0mg	Human recombinant
		Expressed in insect cells			Expressed in insect cells
13700	0.1mg	Formiminotransferase Cyclodeaminase (LC 1)	17900	0.1mg	PDC-E2
13701	1.0mg	Human recombinant	17901	1.0mg	Human recombinant
		Expressed in insect cells			Expressed in <i>E. coli</i>
30800	0.1mg	SLA/LP	18900	0.1mg	Sp100
30801	1.0mg	Human recombinant	18901	1.0mg	Human recombinant
		Expressed in <i>E. coli</i>			Expressed in insect cells
18000	0.1mg	M2	19000	0.1mg	gp210
18001	1.0mg	Human recombinant	19001	1.0mg	Human recombinant
		Expressed in insect cells			Expressed in insect cells
17700	0.1mg	BCOADC-E2	19400	0.1mg	Nup62
17701	1.0mg	Human recombinant	19401	1.0mg	Human recombinant
		Expressed in insect cells			Expressed in insect cells

ANCA Associated Diseases

18500	0.1mg	Myeloperoxidase (MPO; non recombinant)	19200	0.1mg	BPI (non recombinant)
18501	1.0mg	Non recombinant	19201	1.0mg	Non recombinant
		Human leukocytes			Human leukocytes
18600	0.1mg	Proteinase 3 (PR3; non recombinant)			
18601	1.0mg	Non recombinant			
		Human leukocytes			

Antiphospholipid / Thromboembolic Syndrome

14900	0.1mg	β2-Glycoprotein 1 (Apolipoprotein H)	11400	0.1mg	β2-Glycoprotein 1 (Apo H; non re-combinant; bovine)
14901	1.0mg	Human recombinant	11401	1.0mg	Non recombinant
		Expressed in insect cells			Bovine
11300	0.1mg	β2-Glycoprotein 1 (Apo H; non re-combinant; human)			
11301	1.0mg	Non recombinant			
		Human			

Crohn's Disease

19600	0.1mg	GP2
19601	1.0mg	Human recombinant
		Expressed in insect cells

SEROLOGY ANTIGENS
AUTOIMMUNE DISEASE

Diabetes Mellitus

31900	0.1mg	Glutamate Decarboxylase 65 kDa (GAD65; ng)*	30500	0.1mg	IA-2 (ICA 512)
31901	1.0mg		30501	1.0mg	
Human recombinant			Human recombinant		
Expressed in insect cells			Expressed in insect cells		

Anti-GBM Disease

16800	0.1mg	Glomerular Basement Membrane (GBM; dissociated)
16801	1.0mg	
Human recombinant		
Expressed in insect cells		

Pernicious Anemia

16700	0.1mg	Intrinsic Factor
16701	1.0mg	
Human recombinant		
Expressed in insect cells		

* US patents may apply

SEROLOGY ANTIGENS
INFECTIOUS DISEASE



Anaplasmosis

45600	0.1 mg	Anaplasma phagocytophilum Msp5
45601	1.0 mg	
Recombinant		
Expressed in insect cells		
45800	0.1 mg	Anaplasma phagocytophilum OmpA
45801	1.0 mg	
Non recombinant		
Expressed in E. coli		
45500	0.1 mg	Anaplasma phagocytophilum p44
45501	1.0 mg	
Recombinant		
Expressed in E. coli		

Babesiosis

44200	0.1 mg	Babesia microti IRA
44201	1.0 mg	
Recombinant		
Expressed in insect cells		
44100	0.1 mg	Babesia microti p32
44101	1.0 mg	
Recombinant		
Expressed in insect cells		
44000	0.1 mg	Babesia microti p41
44001	1.0 mg	
Recombinant		
Expressed in E.coli		

SEROLOGY ANTIGENS
INFECTIOUS DISEASE

Bartonellosis / Cat Scratch Disease

45000	0.1 mg	<i>Bartonella henselae</i> 17 kDa	45200	0.1 mg	<i>Bartonella henselae</i> SucB
45001	1.0 mg	Recombinant Expressed in <i>E. coli</i>	45201	1.0 mg	Recombinant Expressed in <i>E. coli</i>
45100	0.1 mg	<i>Bartonella henselae</i> 26 kDa			
45101	1.0 mg	Recombinant Expressed in <i>E. coli</i>			

Borreliosis / Lyme Disease

41100	0.1 mg	<i>Borrelia afzelii</i> BmpA	42700	0.1 mg	<i>Borrelia bavariensis</i> DbpA
41101	1.0 mg	Recombinant Expressed in <i>E. coli</i>	42701	1.0 mg	Recombinant Expressed in <i>E. coli</i>
40900	0.1 mg	<i>Borrelia afzelii</i> DbpA	40700	0.1 mg	<i>Borrelia bavariensis</i> p58
40901	1.0 mg	Recombinant Expressed in <i>E. coli</i>	40701	1.0 mg	Recombinant Expressed in <i>E. coli</i>
41000	0.1 mg	<i>Borrelia afzelii</i> OspA	41400	0.1 mg	<i>Borrelia bavariensis</i> VlsE1
41001	1.0 mg	Recombinant Expressed in <i>E. coli</i>	41401	1.0 mg	Recombinant Expressed in <i>E. coli</i>
41800	0.1 mg	<i>Borrelia afzelii</i> OspC	40500	0.1 mg	<i>Borrelia burgdorferi</i> BmpA
41801	1.0 mg	Recombinant Expressed in <i>E. coli</i>	40501	1.0 mg	Recombinant Expressed in <i>E. coli</i>
42300	0.1 mg	<i>Borrelia afzelii</i> p100	40400	0.1 mg	<i>Borrelia burgdorferi</i> DbpA
42301	1.0 mg	Recombinant Expressed in insect cells	40401	1.0 mg	Recombinant Expressed in <i>E. coli</i>

Borreliosis / Lyme Disease

40600	0.1 mg	<i>Borrelia burgdorferi</i> DbpB	41600	0.1 mg	<i>Borrelia burgdorferi</i> p58
40601	1.0 mg	Recombinant Expressed in <i>E. coli</i>	41601	1.0 mg	Recombinant Expressed in <i>E. coli</i>
41300	0.1 mg	<i>Borrelia burgdorferi</i> NapA	41700	0.1 mg	<i>Borrelia burgdorferi</i> p66
41301	1.0 mg	Recombinant Expressed in <i>E. coli</i>	41701	1.0 mg	Recombinant Expressed in <i>E. coli</i>
41200	0.1 mg	<i>Borrelia burgdorferi</i> OspA	40100	0.1 mg	<i>Borrelia burgdorferi</i> p100
41201	1.0 mg	Recombinant Expressed in <i>E. coli</i>	40101	1.0 mg	Recombinant Expressed in insect cells
40300	0.1 mg	<i>Borrelia burgdorferi</i> OspC	45700	0.1 mg	<i>Borrelia burgdorferi</i> VlsE1*
40301	1.0 mg	Recombinant Expressed in <i>E. coli</i>	45701	1.0 mg	Recombinant Expressed in <i>E. coli</i>
42500	0.1 mg	<i>Borrelia burgdorferi</i> p28	42800	0.1 mg	<i>Borrelia garinii</i> DbpA
42501	1.0 mg	Recombinant Expressed in <i>E. coli</i>	42801	1.0 mg	Recombinant Expressed in <i>E. coli</i>
42600	0.1 mg	<i>Borrelia burgdorferi</i> p30	41900	0.1 mg	<i>Borrelia garinii</i> OspC
42601	1.0 mg	Recombinant Expressed in <i>E. coli</i>	41901	1.0 mg	Recombinant Expressed in <i>E. coli</i>
40200	0.1 mg	<i>Borrelia burgdorferi</i> p41	42900	0.1 mg	<i>Borrelia spielmanii</i> DbpA
40201	1.0 mg	Recombinant Expressed in insect cells	42901	1.0 mg	Recombinant Expressed in <i>E. coli</i>
41500	0.1 mg	<i>Borrelia burgdorferi</i> p45	40800	0.1 mg	<i>Borrelia spielmanii</i> OspC
41501	1.0 mg	Recombinant Expressed in insect cells	40801	1.0 mg	Recombinant Expressed in <i>E. coli</i>

* US patents may apply

SEROLOGY ANTIGENS
INFECTIOUS DISEASE

Relapsing Fever

42400	0.1 mg	<i>Borrelia miyamotoi</i> GlpQ
42401	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

Erythema Infectiosum

48000	0.1 mg	Parvovirus B19 VLP VP2
48001	1.0 mg	
		Recombinant
		Expressed in insect cells

48100	0.1 mg	Parvovirus B19 VLP VP1/VP2 Co-Capsid
48101	1.0 mg	
		Recombinant
		Expressed in insect cells

COVID-19

46000	0.1 mg	SARS-CoV-2 Nucleocapsid (N) Protein
46001	1.0 mg	
		Recombinant
		Expressed in insect cells

46100	0.1 mg	SARS-CoV-2 Spike (S) Glycoprotein RBD
46101	1.0 mg	
		Recombinant
		Expressed in insect cells

Yersiniosis

40300	0.1 mg	<i>Yersinia enterocolitica</i> (O:8) YopM
40301	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

43100	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) LcrV
43101	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

43200	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) YopB
43201	1.0 mg	
		Recombinant
		Expressed in insect cells

43300	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) YopD
43301	1.0 mg	
		Recombinant
		Expressed in insect cells

43700	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) YopE
43701	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

43400	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) YopH
43401	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

43500	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) YopM
43501	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

43600	0.1 mg	<i>Yersinia enterocolitica</i> (O:9) YopN
43601	1.0 mg	
		Recombinant
		Expressed in <i>E. coli</i>

SEROLOGY ANTIGENS
ALLERGY



Food

52500	0.1mg	Ara h 1.0101	52700	0.1mg	Ara h 8.0101
52501	1.0mg	Arachis hypogaea	52701	1.0mg	Arachis hypogaea
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells
50100	0.1mg	Ara h 2.0201	52000	0.1mg	Ara h 9.0101
50101	1.0mg	Arachis hypogaea	52001	1.0mg	Arachis hypogaea
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells
52600	0.1mg	Ara h 3.0101	50500	0.1mg	Gly m 4.0101
52601	1.0mg	Arachis hypogaea	50501	1.0mg	Glycine max
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells
51900	0.1mg	Ara h 6.0101	50600	0.1mg	Gly m 5.0101
51901	1.0mg	Arachis hypogaea	50601	1.0mg	Glycine max
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells

* All allergens on request

Food

51800	0.1mg	Cor a 1.0401	52800	0.1mg	Mal d 1.0108
51801	1.0mg	Corylus avellana	52801	1.0mg	Malus domestica
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in E. coli
54200	0.1mg	Cor a 8.0101	53100	0.1mg	Mal d 3.0101
54201	1.0mg	Corylus avellana	53101	1.0mg	Malus domestica
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells
54300	0.1mg	Cor a 9 (non recombinant)	54100	0.1mg	Pen a 1.0101
54301	1.0mg	Corylus avellana	54101	1.0mg	Penaeus aztecus
		Non recombinant			Recombinant
					Expressed in insect cells
54400	0.1mg	Cor a 14.0101	54500	0.1mg	Tri a 14.0101
54401	1.0mg	Corylus avellana	54501	1.0mg	Triticum aestivum
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells

SEROLOGY ANTIGENS
ALLERGY

Grasses

51000	0.1mg	Art v 1.0101	51600	0.1mg	Phl p 6.0101
51001	1.0mg	<i>Artemisia vulgaris</i>	51601	1.0mg	<i>Phleum pratense</i>
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells
51300	0.1mg	Phl p 1.0102	52300	0.1mg	Phl p 7.0101
51301	1.0mg	<i>Phleum pratense</i>	52301	1.0mg	<i>Phleum pratense</i>
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in <i>E. coli</i>
51400	0.1mg	Phl p 2.0101	52400	0.1mg	Phl p 12.0101
51401	1.0mg	<i>Phleum pratense</i>	52401	1.0mg	<i>Phleum pratense</i>
		Recombinant			Recombinant
		Expressed in insect cells			Expressed in insect cells
51500	0.1mg	Phl p 5.0203			
51501	1.0mg	<i>Phleum pratense</i>			
		Recombinant			
		Expressed in insect cells			

HUMAN
CHIMERIC ANTIBODIES

Immunoassays for the detection of antibodies in patient samples require reference material to determine cut-off values and test assay integrity, and these are then included in the kit as calibrators or positive controls. Human chimeric antibodies can serve as an alternative to characterized disease state plasma, which are limited in availability, show variability, and can have safety and ethical issues.



Connective Tissue Diseases

36600	0.1 mg	PCNA humAb IgG	36900	0.1 mg	PL-12 humAb IgG
36601	1.0 mg	Human chimeric	36901	1.0 mg	Human chimeric
37300	0.1 mg	Jo-1 humAb IgG	36500	0.1 mg	SRP54 humAb IgG
37301	1.0 mg	Human chimeric	36501	1.0 mg	Human chimeric
36800	0.1 mg	PL-7 humAb IgG	36700	0.1 mg	Mi-2 humAb IgG
36801	1.0 mg	Human chimeric	36701	1.0 mg	Human chimeric

Autoimmune Liver Diseases

36400	0.1 mg	LKM1 humAb IgG	37200	0.1 mg	PDC-E2 humAb IgG
36401	1.0 mg	Human chimeric	37201	1.0 mg	Human chimeric
37100	0.1 mg	LC1 humAb IgG	37000	0.1 mg	Sp100 humAb IgG
37101	1.0 mg	Human chimeric	37001	1.0 mg	Human chimeric
36200	0.1 mg	SLA/LP humAb IgG			
36201	1.0 mg	Human chimeric			

ENZYMES

With a rich legacy of innovation and quality, BBI Solutions excels in extracting and purifying natural enzymes and related biochemicals from microbial, animal, and plant tissues as well as in development and manufacturing of recombinant enzymes.

For over 60 years, our products have been trusted in medical diagnostics, healthcare, and pharmaceuticals for their effectiveness and reliability. With international manufacturing and global distribution, BBI Solutions is your ideal partner for developing enzyme-based products, serving a diverse, worldwide customer base with excellence..

Quality guaranteed, whatever your requirement

Working with an increasingly regulated marketplace, BBI Solutions is compliant with the ISO 13485:2016 Quality Standard and have the capability of following processes compliant with Current Good Manufacturing Practice (cGMP) Standards.

CORE COMPETENCIES

BBI Solutions is one of the world leaders in the manufacture and supply of high purity specialist enzymes and biochemicals to the diagnostic and pharmaceutical industries.

- + **Extensive product range** – our product portfolio incorporates specific product grades to suit numerous applications.
- + **Custom Manufacture** – we undertake bulk custom manufacture of enzymes, whilst delivering to your exact specifications within a short lead time.
- + **Stability** – we produce highly stable enzyme preparations for customers. This is achieved through the use of quality raw materials, innovative production methodologies and product formulations developed to maximise stability.
- + **Quality** – we aim to develop, manufacture and supply high quality enzymes which are consistent with the expectations and requirements of our customers and meet the applicable regulatory requirements.

KEY ENZYME PRODUCTS

HORSERADISH PEROXIDASE

Horseradish peroxidase (HRP) is one of the most commonly used enzyme labels in immunoassays.

- + **Controlled & consistent supply** – BBI have close and longstanding relationships with horseradish growers to ensure year round supply
- + **High Isozyme C content** – our HRP contains >90% isozyme C which provides exceptional purity so you can have confidence in your results
- + **High activity levels** – we achieve between 250-300U/mg, providing consistent and reliable performance
- + **Highly available amino groups** – this allows for clean conjugation
- + **Bulk extraction and purification capabilities** – large batch sizes allow us to fulfil multiple orders from a single batch reducing validation costs

ALKALINE PHOSPHATASE

ALP is the other enzyme of choice for conjugates in immunoassays. It is often used as an alternative to HRP when a more linear reaction rate is required over a wide range of values. BBI's ALPI13G is our highest specific activity product and best-selling line. Its performance has been proven in assays manufactured by some of the largest immunoassay and IVD companies.

- + **Highest activity on the market** – we achieve > 2500 glycine U/mg protein and 7000 DEA U/mg so you can be confident in the performance of your assay
- + **High stability** – our product experiences <10% activity lost over 48 months ensuring reliable and consistent performance of your assay
- + **Multiple grades of product** – BBI offer ALP in a range of specific activities, including blocking grades, which allows you to pick the best product for your specific application
- + **Bulk extraction and purification capabilities** – large batch sizes allow us to fulfil multiple orders from a single batch reducing validation costs

GLUCOSE OXIDASE

BBI Solutions are the worlds leading supplier of Glucose Oxidase for biosensor application. Our GO is tried and tested and proven to perform in over 5 billion test strips every year.

- + **High levels of activity & purity** – enabling rapid test times and reducing signal interference
- + **Choice & flexibility** – we have multiple grades and custom preparations available for specific applications to optimise your assay at reduced cost
- + **Batch to batch reproducibility & consistency** – optimised and controlled manufacturing procedures to ensure reproducibility and consistency – essential in high volume strips
- + **Reliable source** – with an established and reliable supply chain at the volumes you require, which saves validation time

ENZYME RANGE

Product	Product Code	Activity	Source	Applications
Alkaline Phosphatase	ALPI13G	> 2500 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPI12G	> 2000 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPI11G	> 1800 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPI10G	> 1600 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPI8G	> 1400 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPIXG	> 1000 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPIXT	> 2000 DEA U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPI3	> 20 U/mg material	Bovine intestinal mucosa	Immunoassay
	ALPI6G	> 700 Glycine U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPI8T	> 2600 DEA U/mg protein	Bovine intestinal mucosa	Immunoassay
	ALPIS1	> 1.5 U/mg Protein	Bovine intestinal mucosa	Immunoassay
	ALPIW1	> 2 U/mg Protein	Bovine intestinal mucosa	Immunoassay
	ALPIW2	< 15 U/mg Protein	Bovine intestinal mucosa	Immunoassay
Catalase	CAT2F	> 11,700 U/mg material	Bovine Liver	Clinical Chemistry
	CATAN3F	> 4000 U/mg material	Aspergillus niger	Peroxide removal
Cholesterol Esterase	CE2	> 35 U/mg material	Porcine Pancreas	Biosensor/Clinical Chemistry
	CE4F	> 100 U/mg material	Pseudomonas sp.	Biosensor/Clinical Chemistry
Cholesterol Oxidase	C05F	> 12 U/mg material	Microorganism	Biosensor/Clinical Chemistry
Chondroitinase AC	50-013	0.5IU/vial, Liquid (Frozen)	TBC	Industrial and Other Enzymes
	60-022	0.1 IU/vial, Lyophilized	TBC	Industrial and Other Enzymes
	60-023	2 IU/vial, Lyophilized	TBC	Industrial and Other Enzymes
Chondroitinase B	50-018	5µg/vial, Liquid (Frozen)	TBC	Industrial and Other Enzymes
	60-024	3 IU/vial, Lyophilized	TBC	Industrial and Other Enzymes
	60-025	10 IU/vial, Lyophilized	TBC	Industrial and Other Enzymes
Chymotrypsin	031110BBI	> 5.0 µKatal/mg	Bovine Pancreas	
Creatinase	CR1F	> 9 U/mg material	Recombinant Escherichia coli	Biosensor/Clinical Chemistry
Creatininase	CNN1	> 500 U/mg material	Recombinant Escherichia coli	Biosensor/Clinical Chemistry
Deoxyribonuclease	041160BBI	> 2500 Kunitz U/mg material	Bovine Pancreas	
Glucose Dehydrogenase	GLD1	> 625 U/mg material	Microorganism	Biosensor/Clinical Chemistry
	GLD3	> 300 U/mg material	Microorganism	Biosensor/Clinical Chemistry

Product	Product Code	Activity	Source	Applications
Glucose Oxidase	GO2BS	> 180 U/mg material	Aspergillus niger	Biosensor/Clinical Chemistry/Urine Test Strips
	GO3A	~ 360 U/mg protein	Aspergillus niger	Biosensor/Clinical Chemistry
	GO3B2	~ 360 U/mg protein	Aspergillus niger	Biosensor/Clinical Chemistry/Urine Test Strips
	GO3B3	~ 360 U/mg protein	Aspergillus niger	Biosensor/Clinical Chemistry
Glutamate Dehydrogenase	GDHB3	> 40 U/mg Protein	Bovine Liver	Clinical Chemistry
	GDHB5	> 40 U/mg Protein	Bovine Liver	Clinical Chemistry
	GDHB5G	> 40 U/mg Protein	Bovine Liver	Clinical Chemistry
Heparinase I	50-010	0.5 IU/vial, Liquid (Frozen)		Hemostasis
	50-010-001	0.1 IU/vial, Liquid (Frozen)		Hemostasis
	60-010	0.5 IU/vial, Lyophilized		Hemostasis
	60-012	2 IU/vial, Lyophilized		Hemostasis
	60-014	10 IU/vial, Lyophilized		Hemostasis
	60-017	100 IU/vial, Lyophilized		Hemostasis
Heparinase II	50-011	0.5IU/vial, Liquid (Frozen)		Hemostasis
	50-011-001	0.1 IU/vial, Liquid (Frozen)		Hemostasis
	60-018	0.5 IU/vial, Lyophilized		Hemostasis
Heparinase III	50-012	0.5IU/vial, Liquid (Frozen)		Hemostasis
	50-012-001	0.1 IU/vial, Liquid (Frozen)		Hemostasis
	60-020	0.5 IU/vial, Lyophilized		Hemostasis
Hyaluronidase	081239BBI	> 400 U/mg material	Ovine testes	
	081240BBI	> 500 U/mg material	Bovine testes	
	081245BBI	> 350 U/mg material	Bovine testes	
	081246BBI	> 1000 U/mg material	Bovine testes	
D-3-Hydroxybutyrate Dehydrogenase (HBDH)	rHBDH	>=400U/mg material	Recombinant Escherichia coli	Biosensor/ Clinical Chemistry
Intrinsic Factor	IF1	> 95% purity	Porcine stomach pyloric section	Clinical Chemistry
Lactate Dehydrogenase	LDHP2	> 300 U/mg Protein	Porcine Heart	Clinical Chemistry
	LDHP2FS	> 250 U/mg Protein	Porcine Heart	Clinical Chemistry
Malate Dehydrogenase	MDHP3	> 1500 U/mg Protein	Porcine Heart	Clinical Chemistry
	MDHP3F	> 1500 U/mg Protein	Porcine Heart	Clinical Chemistry
	MDHP3G	> 1500 U/mg Protein	Porcine Heart	Clinical Chemistry

ENZYME RANGE

Product	Product Code	Activity	Rz	Isozyme	Source	Applications
Pepsin	PEP2	> 2500 U/mg material			Porcine stomach mucosa	Protein hydrolysis
Peroxidase	161451BBI	> 250 Pyrogallol U/mg	> 3		Horseradish Roots	Immunoassay/ Clinical Chemistry
	161453BBI	> 100 Pyrogallol U/mg material	> 1		Horseradish Roots	Clinical Chemistry/ Urine Test Strips
	161455BBI	> 60 Pyrogallol U/mg material	> 0.6		Horseradish Roots	Clinical Chemistry
	161457BBI	> 200 Pyrogallol U/mg material	2-4		Horseradish Roots	Clinical Chemistry/ Urine Test Strips
	APO/HRP4C		> 0.05		Horseradish Roots	Immunoassay
	HRP3C	> 150 U/mg material	> 2		Horseradish Roots	Clinical Chemistry
	HRP4	> 250 U/mg material	> 3		Horseradish Roots	Immunoassay
	HRP4B	> 250 U/mg material	> 3	> 90%	Horseradish Roots	Immunoassay
	HRP4C	> 250 U/mg material	> 3		Horseradish Roots	Clinical Chemistry
	HRP5	> 75 U/mg material	~ 3.5		Horseradish Roots	Immunoassay
Porcine Liver Esterase	PLE1F	> 75 U/mg material			Porcine Liver	Urine Test Strips
Ribonuclease	181515BBI	> 100 U/mg material			Bovine pancreas	Molecular Biology
	RN1	> 70 U/mg material			Bovine pancreas	Molecular Biology
	RN1F	> 70 U/mg material			Bovine pancreas	Molecular Biology
	RN2	> 70 U/mg material			Bovine pancreas	Molecular Biology
	RN3	~ 90U/mg			Bovine pancreas	Molecular Biology
Sarcosine Oxidase	SO2F	> 20 U/mg material			Recombinant Escherichia coli	Biosensor/Clinical Chemistry
Superoxide Dismutase	SOD2	> 3000 U/mg material			Porcine stomach mucosa	
Trypsin	201553BBI	> 2500 U/mg material			Bovine Pancreas	Cell culture
	rTRY1					liquid; Cell culture
	rTRY2					lyophilized; Cell culture
Trypsin Inhibitor	SOY1	> 7000 BAEE U/mg material			Soybean	
	SOY2	> 10,000 BAEE U/mg material			Soybean	
Urease	URE2	> 220 Nessler U/mg material			Jack Bean	Biosensor/Clinical Chemistry
	URE3	> 1300 Nessler U/mg protein			Jack Bean	Biosensor/Clinical Chemistry
Uricase	U5	> 4 U/mg material			Recombinant Escherichia coli	Biosensor/Clinical Chemistry

CUSTOM DEVELOPMENT & MANUFACTURE OF ENZYMES

In case BBI Solutions’ off-the-shelf products do not meet your requirements, we offer a custom development and manufacturing service for enzymes.

BBI CAPABILITIES

- + **Specialists in sourcing and extraction of animal and plant products** – we have extensive experience in sourcing raw materials worldwide
- + **Salt/solvent fractionation** – batch sizes of up to 5,000 litres
- + **Chromatography** – ion exchange chromatography, affinity chromatography, size exclusion chromatography, hydrophobic interaction chromatography
- + **Crystallisation** – highly effective protein purification using solvent and aqueous media
- + **Freeze drying** – capability of 49 - 420 litres per cycle
- + **Ultrafiltration** – volumes of 2,500 - 30,000 litres
- + **Quality control** – in-process analysis and monitoring, development of assay/test procedures
- + **Product handling/sampling** – we offer special packing according to customer specifications



FEASIBILITY

- + Small scale purification
- + Critical process parameters gained



DEVELOPMENT

- + Process optimisation
- + Intermediate scale-up



VERIFICATION

- + Routine protein analysis
 - Enzymes assays
 - Protein determinations
 - Analytical chromatography
 - SDS page
 - Isoelectric focusing
- + Develop protocols to ensure optimised yields



VALIDATION

- + Established manufacturing/testing processes
- + Consistent conformance to product specification

MONOCLONAL ANTIBODIES

Anti-Human Ig - unconjugated

Product description	Product code	Target	Application
Human IgA Monoclonal Antibody	MAB217P	IgA	ELISA
Human Immunoglobulin ε (hu-IgE) Monoclonal Antibody	MAB114P	IgE	ELISA
Human IgE Monoclonal Antibody	MAB324P	IgE	ELISA
Human IgE Monoclonal Antibody	MAB325P	IgE	ELISA
Human IgG Heavy Chain Monoclonal Antibody	MAB142P	IgG	ELISA / IHC / WB
Monoclonal to Human IgG1 Monoclonal Antibody	MAB146P	IgG1	ELISA
Human IgG4 Fc Monoclonal Antibody	MAB154P	IgG4	ELISA / IHC / WB
Human IgG Fc Monoclonal Antibody	MAB218P	IgG	ELISA
Human IgG2 Monoclonal Antibody	MAB220P	IgG2	ELISA
Human IgG3 Monoclonal Antibody	MAB221P	IgG3	ELISA
Human IgM Monoclonal Antibody	MAB216P	IgM	ELISA
Human Ig Kappa Light Chain Monoclonal Antibody	MAB199P	Kappa	ELISA / WB
Human Ig Lambda Light Chain Monoclonal Antibody	MAB219P	Lambda	ELISA / WB

Anti-Tag antibodies – unconjugated (Controls)

Product description	Product code	Target	Application
His-tag	MAB230P	His	ELISA / WB
Polyethylene glycol (PEG)	MAB206P	PEG	ELISA
Polyethylene glycol (PEG) Rat	MAB207P	PEG	ELISA / WB
Sheep Polyclonal Antibody to Bromodeoxyuridine-5 (BrdU)-Biotin Conjugated	PAB105B	BrdU	
Sheep Polyclonal Antibody to Bromodeoxyuridine-5 (BrdU)	PAB105P	BrdU	
Goat Anti Biotin IgG, unconjugated Polyclonal Antibody	BP436-3	Biotin	

Tumour markers

Product description	Product code	Target	Application	Capture / Detector
Human Osteopontin Monoclonal Antibody	MAB222P	OPN	ELISA	Capture / Detector Can be paired with MAB193P
Human Osteopontin, C-terminal Monoclonal Antibody	MAB197P	OPN	ELISA / WB	Capture / Detector Can be paired with MAB193P
Human Osteopontin, N-terminal Monoclonal Antibody	MAB193P	OPN	ELISA / WB	Capture / Detector Can be paired with MAB222P
Human Osteopontin, N-terminal Monoclonal Antibody	MAB194P	OPN	ELISA / WB	Capture / Detector Can be paired with MAB222P
Human Osteopontin, N-terminal Monoclonal Antibody	MAB196P	OPN	ELISA / WB	Capture / Detector Can be paired with MAB222P
CA15-3 Monoclonal Antibody	BM236-K6A5	CA15-3	ELISA / WB	Detector
CA15-3 Monoclonal Antibody	BM236-V2G9	CA15-3	ELISA / WB	Capture Can be paired with BM236-K6A5
CA19-9 Monoclonal Antibody	BM238-G6C8	CA19-9	ELISA / WB	Capture
Free PSA Monoclonal Antibody	MAB296P	PSA	ELISA	Capture
PSA Monoclonal Antibody	MAB291P	PSA	ELISA	Capture / Detector Can be paired with MAB292P
PSA Monoclonal Antibody	MAB292P	PSA	ELISA	Capture / Detector Can be paired with MAB291P
IGFBP3 Monoclonal Antibody	BM396-P6F9	IGFBP3	ELISA	Capture Can be paired with BM396-V3C7
IGFBP3 Monoclonal Antibody	BM396-V3C7	IGFBP3	ELISA	Detector Can be paired with BM396-P6F9



MONOCLONAL ANTIBODIES

Cardiac, vascular & diabetes markers

Product description	Product code	Category	Application	Capture / Detector
Human Myeloperoxidase Monoclonal Antibody	MAB208P	Cardiac	ELISA	Capture Can be paired with MAB209P
Human Myeloperoxidase Monoclonal Antibody	MAB209P	Cardiac	ELISA	Detector Can be paired with MAB208P. MAB209 is also self-pairing.
Troponin I Monoclonal Antibody	MAB283P	Cardiac	ELISA	Detector
D Dimer Monoclonal Antibody (clone 3B6)	MAB341P	Cardiac	ELISA / LF / WB	ELISA = Detector, LF = Detector Can be paired with MAB323P
D-dimer Monoclonal Antibody	MAB284P	Cardiac	ELISA	Detector Can be paired with MAB285P
D-dimer Monoclonal Antibody	MAB285P	Cardiac	ELISA	Capture Can be paired with MAB284P
D-dimer Monoclonal Antibody	MAB323P	Cardiac	ELISA / LF / WB	ELISA = Detector, LF = Detector Can be paired with MAB341P
Human Galectin 3 Monoclonal Antibody	BM451-K7H2	Cardiac	ELISA / WB	Detector Can be paired with BM451-N8E8
Human Galectin 3 Monoclonal Antibody	BM451-N8E8	Cardiac	ELISA / WB	Capture Can be paired with BM451-K7H2 or BM451-V7G5
Human Galectin 3 Monoclonal Antibody	BM451-V7G5	Cardiac	ELISA / WB	Detector Can be paired with BM451-N8E8
Human NT-proBNP Monoclonal Ab	BM449-P2F6	Cardiac		
Human NT-proBNP Monoclonal Ab	BM449-S2E1	Cardiac		
HbA1c Monoclonal Antibody	BM300-H2E2	Diabetes		
Haemoglobin Monoclonal Antibody	BM302-S6B9	Vascular		

Hormonal markers

Product description	Product code	Category	Application	Capture / Detector
Cortisol Monoclonal Antibody	MAB215P	Metabolism	ELISA	
ACTH Monoclonal Antibody	BM445-S5B2	Metabolism		
Parathyroid Hormone Monoclonal Antibody	BM361-E4H3	Metabolism	ELISA	Detector
Human Chorionic Gonadotropin- Beta (hCG-Beta) Monoclonal Antibody	MAB106P	Pregnancy	ELISA / WB	
Human Chorionic Gonadotropin- Beta (hCG-Beta) Monoclonal Antibody	MAB107P	Pregnancy	ELISA	
Human Chorionic Gonadotropin- Intact (hCG) Monoclonal Antibody	MAB105P	Pregnancy	ELISA / WB	
Human Prolactin Monoclonal Antibody	MAB121P	Pregnancy	ELISA	
Human Prolactin Monoclonal Antibody	MAB122P	Pregnancy	ELISA	
Progesterone Monoclonal Antibody	MAB234P	Pregnancy	ELISA (competitive)	
Progesterone Monoclonal Antibody	MAB235P	Pregnancy	ELISA (competitive)	
Progesterone Monoclonal Antibody	MAB286P	Pregnancy	ELISA (competitive)	
AMH Monoclonal Antibody	BM459-P2B4	Pregnancy	CLIA / ELISA / LF	Capture Can be paired with BM459-S4E8
AMH Monoclonal Antibody	BM459-S4E8	Pregnancy	CLIA / ELISA / LF	Detector Can be paired with BM459-P2B4
3,5,3'-Triiodothyronine (T3) Monoclonal Antibody	MAB124P	Thyroid	ELISA (competitive)	
Human Thyroid-Stimulating Hormone Alpha (hTSH-α) Monoclonal Antibody	MAB132P	Thyroid	ELISA	Capture / Detector
Human Thyroid-Stimulating Hormone-Beta (hTSH-β) Monoclonal Antibody	MAB128P	Thyroid	ELISA	Detector
Human Thyroid-Stimulating Hormone-Beta (hTSH-β) Monoclonal Antibody	MAB130P	Thyroid	ELISA	Capture / Detector
T3 Monoclonal Antibody	BM440-P3H6	Thyroid	ELISA	Capture

MONOCLONAL ANTIBODIES

Infectious disease & biothreat infectious antibodies

Product description	Product code	Category	Application	Capture / Detector
Adenovirus Monoclonal Antibody	MAB604P	Adenoviral infections	ELISA / IFA / LF / WB	Capture Can be paired with MAB605P
Adenovirus Monoclonal Antibody	MAB605P	Adenoviral infections	ELISA / IFA / LF / WB	Detector Can be paired with MAB604P
Bacillus anthracis Monoclonal Antibody	BB1008	Biothreat infectious	ELISA / LF	
Burkholderia Monoclonal Antibody	BB1158	Biothreat infectious	ELISA / LF	
Yersinia pestis Monoclonal Antibody	BB1190	Biothreat infectious	ELISA / LF	
Brucella Monoclonal Antibody	BB1063	Biothreat infectious	ELISA / LF	
Brucella Monoclonal Antibody	BB1071	Biothreat infectious	ELISA / LF	
Anti-Burkholderia Mouse Monoclonal Antibody	BB1159	Biothreat infectious	ELISA / LF	
Coxiella Monoclonal Antibody	BB1160	Biothreat infectious		
Coxiella Monoclonal Antibody	BB1162	Biothreat infectious		
Coxiella Monoclonal Antibody	BB1163	Biothreat infectious		
Coxiella Monoclonal Antibody	BB1214	Biothreat infectious	ELISA / LF	
Campylobacter jejuni Monoclonal Antibody	MAB229P	Campylobacteriosis	ELISA	
Chikungunya Virus Monoclonal Antibody	MAB243P	Chikungunya	ELISA / WB	
Chikungunya Virus Monoclonal Antibody	MAB244P	Chikungunya	ELISA / WB	
Chikungunya Virus Monoclonal Antibody	MAB245P	Chikungunya	ELISA	
Dengue NS1 Monoclonal Antibody	MAB320P	Dengue fever		
Dengue NS1 Monoclonal Antibody	MAB321P	Dengue fever		
Dengue NS1 Monoclonal Antibody	MAB322P	Dengue fever		
Influenza A Monoclonal Antibody	BM500-5A4	Infectious Disease Antibody		
Influenza A Monoclonal Antibody	BM500-8F8	Infectious Disease Antibody		
Influenza B Monoclonal Antibody	BM501-1A2	Infectious Disease Antibody		
Influenza A/B Monoclonal Antibody	BM501-25F4	Infectious Disease Antibody		

Infectious disease & biothreat infectious antibodies

Product description	Product code	Category	Application	Capture / Detector
NS1 (Dengue) Monoclonal Antibody	BM339-P6C6	Dengue fever	LF	Capture / Detector Can be paired with BM339-T3H2
NS1 (Dengue) Subtype 2 Monoclonal Antibody	BM339-T3H2	Dengue fever	LF	Capture / Detector Can be paired with BM339-P6C6
Ebola Zaire Monoclonal Antibody	BM431-V1D1	Ebola	LF / WB	
Ebola Zaire Monoclonal Antibody	BM431-M4B1	Ebola		
Helicobacter pylori Monoclonal Antibody	MAB807P	Gastrointestinal infections	ELISA	Capture / Detector (self-pairing)
Norovirus Monoclonal Antibody	MAB224P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB225P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB226P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB227P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB228P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB242P	Gastrointestinal infections	ELISA	
Rotavirus Monoclonal Antibody	MAB606P	Gastrointestinal infections	ELISA / WB	Capture / Detector (self-pairing)
C.difficile GDH Monoclonal Antibody	MAB294P	Gastrointestinal infections	ELISA	Capture Can be paired with MAB295P
C.difficile GDH Monoclonal Antibody	MAB295P	Gastrointestinal infections	ELISA	Detector Can be paired with MAB294P
Norovirus Monoclonal Antibody	BM349-G1G1	Gastrointestinal infections	LF	Capture
Norovirus Monoclonal Antibody	BM349-H1C3	Gastrointestinal infections	LF	Capture

MONOCLONAL ANTIBODIES

Infectious disease & biothreat infectious antibodies

Product description	Product code	Category	Application	Capture / Detector
Norovirus Monoclonal Antibody	MAB287P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB288P	Gastrointestinal infections	ELISA	
Norovirus Monoclonal Antibody	MAB289P	Gastrointestinal infections	ELISA	
Toxin A (C.Difficile) Monoclonal Antibody	BM346-E4B9	Gastrointestinal infections		
Toxin B (C.Difficile) Monoclonal Antibody	BM347-N4A8	Gastrointestinal infections	ELISA / LF / WB	Capture Can be paired with BM347-T4G1
Toxin B (C.Difficile) Monoclonal Antibody	BM347-T4G1	Gastrointestinal infections	ELISA / LF / WB	Detector
Human Immunodeficiency Virus p24 protein Monoclonal Antibody	MAB246P	HIV/AIDS	ELISA / LF	Detector Can be paired with MAB249P
Human Immunodeficiency Virus p24 protein Monoclonal Antibody	MAB247P	HIV/AIDS	ELISA	Capture / Detector Can be paired with MAB249P or MAB248P
Human Immunodeficiency Virus p24 protein Monoclonal Antibody	MAB248P	HIV/AIDS	ELISA / LF	Detector Can be paired with MAB247P
Human Immunodeficiency Virus p24 protein Monoclonal Antibody	MAB249P	HIV/AIDS	ELISA / LF	Capture Can be paired with MAB246P or MAB247P
Listeria Monoclonal Antibody	BM401-K4H9	Listeriosis	LF	
Listeria Monoclonal Antibody	BM401-T7B6	Listeriosis	LF	Capture

Infectious disease & biothreat infectious antibodies

Product description	Product code	Category	Application	Capture / Detector
Respiratory Syncytial Virus Monoclonal Antibody	MAB602P	Respiratory infections	ELISA / IFA / LF / WB	Capture / Detector Can be paired with MAB603P
Respiratory Syncytial Virus Monoclonal Antibody	MAB603P	Respiratory infections	ELISA / IFA / LF / WB	Capture / Detector Can be paired with MAB602P
Streptococcus Group A Rabbit Monoclonal Antibody	MAB887P	Scarlet fever	ELISA	Capture / Detector (self-pairing)
Streptococcus equi subsp. equi Monoclonal Antibody	MAB212P	Veterinary	ELISA	Capture / Detector Can be paired with MAB211P
Streptococcus equi subsp. equi Monoclonal Antibody	MAB211P	Veterinary	ELISA	Capture / Detector Can be paired with MAB212P
Zika NS1 Monoclonal Antibody	MAB315P	Zika fever	ELISA	Capture
Zika NS1 Monoclonal Antibody	MAB318P	Zika fever	ELISA	Detector
Zika NS1 Monoclonal Antibody	MAB319P	Zika fever	ELISA	Detector

MONOCLONAL ANTIBODIES

Inflammation markers

Product description	Product code	Application	Capture / Detector
Ferritin Monoclonal Antibody	BM210-P3A8	ELISA	Detector
Rabbit Ferritin Polyclonal Antibody	BP230-3		
Ferritin Monoclonal Antibody	MAB290P	ELISA	Capture / Detector (self-pairing)
Procalcitonin Monoclonal Antibody	BM448-H9F1	ELISA	Capture / Detector Can be paired with BM448-V4A1
Procalcitonin Monoclonal Antibody	BM448-K8C7	ELISA	Capture / Detector Can be paired with BM448-V4A1
Procalcitonin Monoclonal Antibody	BM448-V4A1	ELISA	Capture / Detector Can be paired with BM448-K8C7 and BM448-H9F1
CRP Monoclonal Antibody	MAB326P	ELISA / LF	Self-pairing or can be paired with MAB327P
CRP Monoclonal Antibody	MAB327P	ELISA / LF	Can be paired with MAB326P as capture or detector
Human Lactoferrin Monoclonal Antibody	MAB232P	ELISA	Capture / Detector Can be paired with MAB233P
Human Lactoferrin Monoclonal Antibody	MAB233P	ELISA	Capture / Detector Can be paired with MAB232P
IL-6 Monoclonal Antibody	MAB342P	Inflammation Marker Antibody	
IL-6 Monoclonal Antibody	MAB343P	Inflammation Marker Antibody	

Renal markers

Product description	Product code	Application	Capture / Detector
Renin Monoclonal Antibody	BM438-K9C2		
Renin Monoclonal Antibody	BM438-S4D2		
HbA1c Monoclonal Antibody	BM300-H2E2		

Explosives/Biothreat

Product description	Product code	Category	Application	Capture / Detector
PETN Monoclonal Antibody	EW75A	Explosives	ELISA / LF	
Anti-RDX Mouse Monoclonal Antibody	EW75B	Explosives	ELISA / LF	
Anti-TNT Mouse Monoclonal Antibody	EW75C	Explosives	ELISA / LF	

ANTIBODY DEVELOPMENT

BBI Solutions offers expert partnership in the development of monoclonal, or polyclonal development and production of antibodies.

An industry leading advantage, ‘MultiPure’ allows customers to see assay performance data eight weeks sooner than typical developments and use that data to inform clone selection.

Development & production

+ Monoclonal antibody development

+ Polyclonal antibody development

+ In-vitro antibody production

Purification

+ Protein A purification

+ Protein G purification

Characterisation

+ ELISA

+ Western Blot

+ SDS-PAGE

+ Isoelectric Focusing (IEF)

+ Endotoxin testing

+ Matched pair evaluation

+ SEC

+ Cellular imaging

+ Immunohistochemistry (IHC)

FEASIBILITY

- 

Antigen Analysis
Option to receive a custom report, prepared by an immunologist, to identify the right antigen strategy for any goal.
- 

Detailed Project Plan
Identify goals, reagents, screening strategies and set contingency plans to ensure timely development.
- 

MultiPure
Generate up to 1mg discovery-grade purified antibodies from fusion candidates during hybridoma development to select clones based on end use performance.
- 

Characterisation Assays
Characterise antibody candidates beyond standard indirect ELISA screening, so only the right antibodies go to subcloning.
- 

Technical Support
Hands on support from project managers, technical sales team and immunology experts at every project milestone.

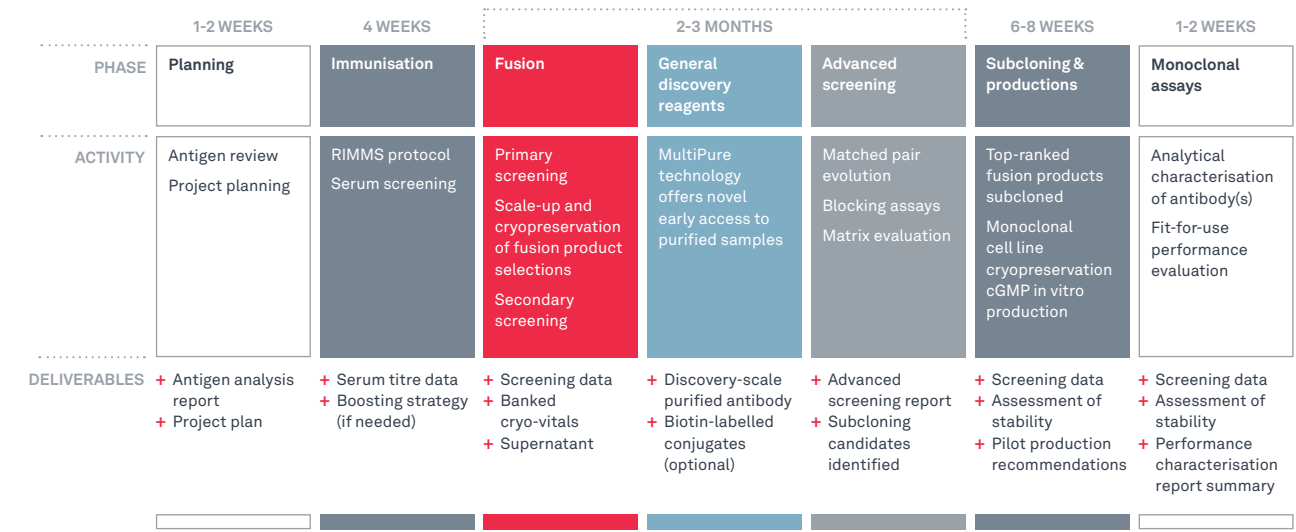
Contact BBI Solutions today to develop the right antibodies for any application:

Phone: +44 (0)1495 363 000
Email: sales@bbisolutions.com

Accelerate Timelines

Timely development is a high priority for most antibody development customers. Thorough project planning, rapid immunisation protocol (RIMMS), and efficient data analysis at every project milestone, work together to accelerate project timelines. When goals change during the course of development, planning and communication allow BBI to be agile in making decisions and change the pathway to allow a project to be kept on track, meet new goals, and get the right result quicker.

A typical project plan*



* Representative

WHAT YOU CAN EXPECT FROM BBI

Advanced screening capabilities

MultiPure allows customers to select clones based on specificity, sensitivity, matched pair compatibility, matrix compatibility, diversity and native recognition.

ISO13485:2016 manufacturing standards

Our ISO13485:2016 certified in vitro antibody manufacturing and custom production options to secure long term supply management.

Knowledge and experience

The antibody technical team brings over 30 years of deep expertise in immunology, antibody and immunoassay development to every project.

Unparalleled customer communication

Customers are informed at all project stages of the data and analysis they need to make goal driven decisions.

SERUM & PLASMA

Disease state serum

Product code	Product description	Category	Disease	Matrix available	Source
SH155-4	Rheumatoid Factor Positive Citrate Plasma	Autoimmune & Inflammation	Rheumatoid Arthritis	Citrate Plasma	Europe/USA
SH244-7	Anti-TPO Positive Processed Serum				
SH285-2	First Trimester Pregnancy Serum			Off-clot Serum	Europe
SH283-2	Second Trimester pooled serum				
SH284-2	Third Trimester Pregnancy Serum			Off-clot Serum	Europe
SH252-9	Synthetic Rubella IgM Serum	Infectious Disease	TORCH	Spiked defibinated Plasma	Europe

Analyte depleted serum

Product code	Product description	Category
SF236-7	Steroid Depleted Processed Serum	Hormones
SF518-7A	Testosterone Depleted Serum	Hormones
SF219-2B	Thyroid Stimulating Hormone Depleted Serum	Hormones
SF231-7	T3/T4 Depleted Processed Serum	Hormones
SF142-7	Immunoglobulin G Depleted Processed Serum	Immunoglobulin
SF505-2	Immunoglobulins Depleted Serum	Immunoglobulin
SF504-7A	Vitamin D Depleted Processed Serum	Vitamins

Custom options and development products available.
Examples include Iron Depleted, Insulin Depleted, Ferritin Depleted, Hormone Depleted, TSH/T3/T4 Depleted.

GOLD NANOPARTICLES & CONJUGATES

Gold nanoparticles

We have been supplying high quality gold nanoparticles and fully optimised gold conjugates for over 30 years, enabling the development of robust, reliable assays and consistent results time after time. Providing a uniform shape and standard size, with a CV of <8%, our gold colloid is available in a variety of sizes from 20nm - 80nm and is available in batch volumes up to 350L.

Gold Starter Packs

Product	Product code	Quantity
Gold Colloid 20nm / 40nm / 60nm / 80nm	GCIKITDIAG/4	20ml
Gold Colloid 20nm / 40nm / 60nm / 80nm	GCIKITDIAG/7	100ml
Gold Colloid 5nm / 10nm / 20nm / 40nm	GCIKITLIFE/4	20ml

Gold Colloids (Gold nanoparticles)

Product description	Product code	Pack size in ml	Particle size in nm	Grade	Gold particle size
Gold Colloid 5nm 20ml	EM.GC5/4	20	5	EM	5nm Gold Nanoparticles
Gold Colloid 5nm 100ml	EM.GC5/7	100	5	EM	
Gold Colloid 5nm 1000ml	EM.GC5/1L	1000	5	EM	
Gold Colloid 10nm 20ml	EM.GC10/4	20	10	EM	10nm Gold Nanoparticles
Gold Colloid 10nm 100ml	EM.GC10/7	100	10	EM	
Gold Colloid 10nm 1L	EM.GC10/1L	1000	10	EM	
Gold Colloid 15nm 20ml	EM.GC15/4	20	15	EM	15nm Gold Nanoparticles
Gold Colloid 15nm 100ml	EM.GC15/7	100	15	EM	
Gold Colloid15nm 1L	EM.GC15/1L	1000	15	EM	
Gold Colloid 20nm 20ml	EM.GC20/4	20	20	EM	20nm Gold Nanoparticles
Gold Colloid 20nm 100ml	EM.GC20/7	100	20	EM	
Gold Colloid 20nm 1L	EM.GC20/1L	1000	20	EM	
Gold Colloid 30nm 20ml	EM.GC30/4	20	30	EM	30nm Gold Nanoparticles
Gold Colloid 30nm 1000ml	EM.GC30/1L	1000	30	EM	
Gold Colloid 40nm 20ml	EM.GC40/4	20	40	EM	40nm Gold Nanoparticles
Gold Colloid 40nm 20ml (OD4.5 -5)	EM.GC40SPL/4	20	40	EM	
Gold Colloid 30nm 100ml	EM.GC30/7	100	40	EM	
Gold Colloid 40nm 100ml	EM.GC40/7	100	40	EM	
Gold Colloid 40nm 100ml (OD4.5 -5)	EM.GC40SPL/7	100	40	EM	
Gold Colloid 40nm 500ml	EM.GC40/8	500	40	EM	
Gold Colloid 40nm 500ml (OD4.5 -5)	EM.GC40SPL/8	500	40	EM	
Gold Colloid 40nm 1000ml	EM.GC40/1L	1000	40	EM	
Gold Colloid 40nm (OD4.5 -5)	EM.GC40SPL/1L	1000	40	EM	

Gold Colloids (Gold nanoparticles)

Product description	Product code	Pack size in ml	Particle size in nm	Grade	Gold particle size
Gold Colloid 50nm 20ml	EM.GC50/4	20	50	EM	50nm Gold Nanoparticles
Gold Colloid 50nm 100ml	EM.GC50/7	100	50	EM	
Gold Colloid 50nm 1000ml	EM.GC50/1L	1000	50	EM	
Gold Colloid 60nm 20ml	EM.GC60/4	20	60	EM	60nm Gold Nanoparticles
Gold Colloid 60nm 100ml	EM.GC60/7	100	60	EM	
Gold Colloid 60nm 1000ml	EM.GC60/1L	1000	60	EM	
Gold Colloid 80nm 20ml	EM.GC80/4	20	80	EM	80nm Gold Nanoparticles
Gold Colloid 80nm 100ml	EM.GC80/7	100	80	EM	
Gold Colloid 80nm 1000ml	EM.GC80/1L	1000	80	EM	
Gold Colloid 100nm 20ml	EM.GC100/4	20	100	EM	100nm Gold Nanoparticles
Gold Colloid 100nm 100ml	EM.GC100/7	100	100	EM	
Gold Colloid 150nm 20ml	EM.GC150/4	20	150	EM	150nm Gold Nanoparticles
Gold Colloid150nm 100ml	EM.GC150/7	100	150	EM	
Gold Colloid 200nm 20ml	EM.GC200/4	20	200	EM	200nm Gold Nanoparticles
Gold Colloid 200nm 100ml	EM.GC200/7	100	200	EM	
Gold Colloid 250 - 20ml	EM.GC250/4	20	250	EM	250nm Gold Nanoparticles
Gold Colloid 250nm 100ml	EM.GC250/7	100	250	EM	

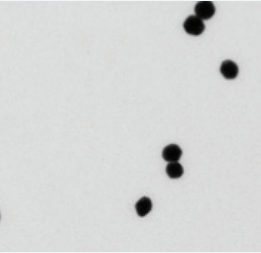
Our High OD Gold nanoparticles are available as 20nm and 40nm and at concentrations of OD5 and OD10.

Product description	Product code	Pack size in ml	Particle size in nm	Gold particle size
Gold Colloid 20nm 10ml	HD.GC20.OD10/10	10	20	20nm Gold Nanoparticles
Gold Colloid 20nm 50ml	HD.GC20.OD10/50	50	20	
Gold Colloid 20nm 10ml	HD.GC20.OD5/10	10	20	
Gold Colloid 20nm 50ml	HD.GC20.OD5/50	50	20	
Gold Colloid 40nm 10ml	HD.GC40.OD10/10	10	40	40nm Gold Nanoparticles
Gold Colloid 40nm OD10 50ml	HD.GC40.OD10/50	50	40	

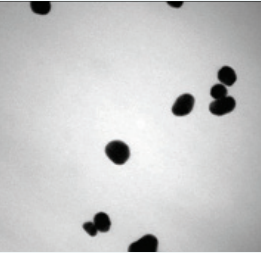
BBI Quality

BBI’s unique manufacturing technique allows for the production of large batches of gold to a high level of reproducibility of size, dispersion and shape. This ensures a firm foundation for conjugation and peace of mind that your rapid assay will provide reliable results. This is not the case for all gold nanoparticles.

BBI 40nm Gold



Competitor 40nm Gold



GOLD CONJUGATES

Anti-Tag Gold Conjugates

Product description	Product code	Pack size in ml	Particle size in nm	OD	Type of label
BA Monoclonal Anti-Biotin 40nm OD10 5ml	BA.MAB40/X	5	40	10	Biotin
Monoclonal Anti-Biotin 40nm OD10 5ml	CC.MAB40/x	5	40	10	Biotin
Goat Anti-Biotin 40nm OD10 5ml	BA.GAB40/X	5	40	10	Biotin
BA Monoclonal Anti-Biotin 40nm OD10 100ml	BA.MAB40/7	100	40	10	Biotin
Monoclonal Anti-Biotin 40nm OD10 100ml	CC.MAB40/7	100	40	10	Biotin
Goat Anti-Biotin 40nm OD10 100ml	BA.GAB40/7	100	40	10	Biotin
Monoclonal Anti-Biotin 40nm OD10 500ml	BA.MAB40/8	500	40	10	Biotin
Mc Anti-Biotin 40nm	CC.MAB40/8	500	40	10	Biotin
Goat Anti-Biotin 40nm OD10 500ml	BA.GAB40/8	500	40	10	Biotin
Anti Digoxin 40nm OD10 5ml	BA.DIG40/x	5	40	10	Digoxin
Anti Digoxin 40nm OD10 100ml	BA.DIG40/7	100	40	10	Digoxin
Anti Digoxin 40nm OD10 500ml	BA.DIG40/8	500	40	10	Digoxin
Anti-FITC 40nm OD10 5ml	BA.FITC40/x	5	40	10	FITC
Anti-FITC 40nm OD10 100ml	BA.FITC40/7	100	40	10	FITC
Anti-FITC 40nm OD10 500ml	BA.FITC40/8	500	40	10	FITC
Anti-His-tag 40nm OD10 5ml	BA.HT40/x	5	40	10	His-Tag
Anti-His-tag 40nm OD10 100ml	BA.HT40/7	100	40	10	His-Tag
Anti-His-tag 40nm OD10 500ml	BA.HT40/8	500	40	10	His-Tag
Anti-HRP 40nm OD10 5ml	BA.HRP40/x	5	40	10	HRP
Anti-HRP 40nm OD10 100ml	BA.HRP40/7	100	40	10	HRP
Anti-HRP 40nm OD10 500ml	BA.HRP40/8	500	40	10	HRP

Why BBI?

Used in over 400 million assays every year, our gold manufacturing technique guarantees:

- + **Uniformity** with ≤5% odd shapes and a CV of ≤8%, the uniform shape and size of BBI gold ensures even antibody binding, giving reliable results in your assay
- + **High stability** – a minimum one year shelf life ensures a settled test manufacturing regime, saving you time and wastage
- + **Scalability** – our batch sizes go up to 340L (40nm)to ensure you have continuous supply
- + **Quality** – BBI gold must pass strict quality procedures before it’s released to our customers, guaranteeing impressive performance characteristics at scale

Protein Gold Conjugates

Product description	Product code	Pack size in ml	Particle size in nm	OD	Grade	Protein
Bovine Serum Albumin 10nm 0.25ml	EM.BSA10/1	0.25	10		EM	BSA
Bovine Serum Albumin 15nm 0.25ml	EM.BSA15/1	0.25	15		EM	BSA
Bovine Serum Albumin 20nm 0.25ml	EM.BSA20/1	0.25	20		EM	BSA
Bovine Serum Albumin 40nm 0.25ml	EM.BSA40/1	0.25	40		EM	BSA
Bovine Serum Albumin 10nm 1ml	EM.BSA10/2	1	10		EM	BSA
Bovine Serum Albumin15nm 1ml	EM.BSA15/2	1	15		EM	BSA
Bovine Serum Albumin 20nm 1ml	EM.BSA20/2	1	20		EM	BSA
Bovine Serum Albumin 40nm 1ml	EM.BSA40/2	1	40		EM	BSA
Bovine Serum Albumin 40nm OD10 5ml	BA.BSA40/X	5	40	10		BSA
Bovine Serum Albumin 40nm OD10 100ml	BA.BSA40/7	100	40	10		BSA
Bovine Serum Albumin 40nm OD10 500ml	BA.BSA40/8	500	40	10		BSA
Protein A 10nm Gold 0.25ml	EM.PAG10/1	0.25	10		EM	Protein A
Protein A 15nm Gold 0.25ml	EM.PAG15/1	0.25	15		EM	Protein A
Protein A 10nm Gold 1ml	EM.PAG10/2	1	10		EM	Protein A
Protein A 15nm Gold 1ml	EM.PAG15/2	1	15		EM	Protein A
Protein A 40nm OD10 5ml	BA.PAG40/X	5	40	10		Protein A
Protein A 40nm OD10 100ml	BA.PAG40/7	100	40	10		Protein A
Protein A 40nm OD10 500ml	BA.PAG40/8	500	40	10		Protein A
Streptavidin 5nm 0.25ml	EM.STP5/1	0.25	5		EM	Streptavidin
Streptavidin 10nm 0.25ml	EM.STP10/1	0.25	10		EM	Streptavidin
Streptavidin 20nm 0.25ml	EM.STP20/1	0.25	20		EM	Streptavidin
Streptavidin 5nm 1ml	EM.STP5/2	1	5		EM	Streptavidin
Streptavidin10nm 1ml	EM.STP10/2	1	10		EM	Streptavidin
Streptavidin 20nm 1ml	EM.STP20/2	1	20		EM	Streptavidin

GOLD CONJUGATES

Immunoglobulin Gold Conjugates

Product description	Product code	Pack size in ml	Particle size in nm	OD	Immunoglobulin
Chicken IgY 40nm OD10 5ml Sample	CONT.CHICK/X	5	40	10	Chicken IgY
Chicken IgY 40nm OD10 100ml	CONT.CHICK/7	100	40	10	Chicken IgY
Chicken IgY 40nm OD10 500ml	CONT.CHICK/8	500	40	10	Chicken IgY
Chicken IgY 40nm OD10	CONT.CHICK	Custom	40	10	Chicken IgY
Chicken IgY 40nm OD10	CONT.CHICK	Custom	40	10	Chicken IgY
Mouse IgG 40nm OD10 5ml	BA.MG40/X	5	40	10	Mouse IgG
Mouse IgG 40nm OD10 100ml	BA.MG40/7	100	40	10	Mouse IgG
Mouse IgG 40nm OD10 500ml	BA.MG40/8	500	40	10	Mouse IgG

Anti-Hormome Antibodies - Gold Conjugates

Product description	Product code	Pack size in ml	Particle size in nm	OD	Hormone
Monoclonal Anti HCG 40nm OD10 5ml	BA.HCG40/X	5	40	10	Human chorionic gonadotropin (hCG)
Monoclonal Anti HCG 40nm OD10 100ml	BA.HCG40/7	100	40	10	
Monoclonal Anti HCG 40nm OD10 500ml	BA.HCG40/8	500	40	10	
Monoclonal Anti LH 40nm OD10 5ml	BA.LH40/X	5	40	10	LH (Luteinizing hormone)
Monoclonal Anti LH 40nm OD10 100ml	BA.LH40/7	100	40	10	

Secondary Antibodies - Gold Conjugates

Product description	Product code	Pack size in ml	Particle size in nm	Gade	Immunoglobulin detected	Host species
Rabbit Anti Goat IgG 10nm 0.25ml	EM.RAG10/1	0.25	10	EM	Goat IgG	Rabbit
Rabbit Anti Goat IgG 15nm 0.25	EM.RAG15/1	0.25	15	EM	Goat IgG	Rabbit
Rabbit Anti Goat IgG 10nm 01ml	EM.RAG10/2	1	10	EM	Goat IgG	Rabbit
Rabbit Anti Goat IgG 15nm 1ml	EM.RAG15/2	1	15	EM	Goat IgG	Rabbit
Goat Anti Guinea-pig IgG 10nm 0.25ml	EM.GAG10/1	0.25	10	EM	Guinea Pig IgG	Goat
Goat Anti Guinea-pig IgG 10nm 1ml	EM.GAG10/2	1	10	EM	Guinea Pig IgG	Goat

Secondary Antibodies - Gold Conjugates (cont.)

Product description	Product code	Pack size in ml	Particle size in nm	OD	Gade	Immunoglobulin detected	Host species
Goat Anti Human IgA 40nm OD10 5ml	BA.GAHA40/X	5	40	10		Human IgA	Goat
Goat Anti Human IgA 40nm OD10 100ml	BA.GAHA40/7	100	40	10		Human IgA	Goat
Goat Anti Human IgA 40nm OD10 500ml	BA.GAHA40/8	500	40	10		Human IgA	Goat
Anti Human IgE 40nm OD10 5ml	BA.MAHE40/x	5	40	10		Human IgE	
Anti Human IgE 40nm OD10 100ml	BA.MAHE40/7	100	40	10		Human IgE	
Anti Human IgE 40nm OD10 500ml	BA.MAHE40/8	500	40	10		Human IgE	
Goat Anti Human IgG 10nm 0.25ml	EM.GAH10/1	0.25	10		EM	Human IgG	Goat
Goat Anti Human IgG 20nm 0.25ml	EM.GAH20/1	0.25	20		EM	Human IgG	Goat
Goat Anti Human IgG 10nm 1ml	EM.GAH10/2	1	10		EM	Human IgG	Goat
Goat Anti Human IgG 20nm 1ml	EM.GAH20/2	1	20		EM	Human IgG	Goat
Goat Anti Human IgG (H+L) 40nm OD10 5ml	BA.GAHL40/X	5	40	10		Human IgG	Goat
Goat Anti Human IgG 40nm OD10 5ml	BA.GAH40/X	5	40	10		Human IgG	Goat
Goat Anti Human IgG (H+L) 40nm OD10 100ml	BA.GAHL40/7	100	40	10		Human IgG	Goat
Goat Anti Human IgG 40nm OD10 100ml	BA.GAH40/7	100	40	10		Human IgG	Goat
Goat Anti Human IgG (H+L) 40nm OD10 500ml	BA.GAHL40/8	500	40	10		Human IgG	Goat
Goat Anti Human IgG 40nm OD10 500ml	BA.GAH40/8	500	40	10		Human IgG	Goat

GOLD CONJUGATES

Secondary Antibodies - Gold Conjugates (cont.)

Product description	Product code	Pack size in ml	Particle size in nm	OD	Gade	Immunoglobulin detected	Host species
Goat Anti Human IgM 40nm OD 10 5ml	BA.GAHM40/X	5	40	10		Human IgM	
Goat Anti Human IgM 40nm OD 10 100ml	BA.GAHM40/7	100	40	10		Human IgM	
Goat Anti Human IgM 40nm OD 10 500ml	BA.GAHM40/8	500	40	10		Human IgM	
Goat Anti Mouse IgG 10nm 0.25ml	EM.GAM10/1	0.25	10		EM	Mouse IgG	Goat
Goat Anti Mouse IgG(H+L) 10nm -0.25ml	EM.GMHL10/1	0.25	20		EM	Mouse IgG	Goat
Goat Anti Mouse IgG (H+L) 20nm 0.25ml	EM.GMHL20/1	0.25	10		EM	Mouse IgG	Goat
Goat Anti Mouse IgG 10nm 1ml	EM.GAM10/2	1	10		EM	Mouse IgG	Goat
Goat Anti Mouse IgG(H+L) 10nm 1ml	EM.GMHL10/2	1	20		EM	Mouse IgG	Goat
Goat Anti Mouse IgG(H+L) 20nm 1ml	EM.GMHL20/2	1	40		EM	Mouse IgG	Goat
Goat Anti Mouse IgG 40nm OD10 5ml	BA.GAM40/X	5	40	10		Mouse IgG	Goat
Goat Anti Mouse IgG (H+L) 40nm OD10 5ml	CC.GAM40/X	5	40	10		Mouse IgG	Goat
Goat Anti Mouse IgG 40nm OD10 100ml	BA.GAM40/7	100	40	10		Mouse IgG	Goat
Goat Anti Mouse IgG (H+L) 40nm OD10 100ml	CC.GAM40/7	100	40	10		Mouse IgG	Goat
Goat Anti Mouse IgG 40nm OD10 500ml	BA.GAM40/8	500	40	10		Mouse IgG	Goat
Goat Anti Mouse IgG (H+L) 40nm OD10 500ml	CC.GAM40/8	500	40	10		Mouse IgG	Goat
Goat Anti Mouse IgG+IgM 10nm 0.25ml	EM.GAF10/1	0.25	10		EM	Mouse IgG + IgM	Goat
Goat Anti Mouse IgG+IgM 10nm 1ml	EM.GAF10/2	1	10		EM	Mouse IgG + IgM	Goat

Secondary Antibodies - Gold Conjugates (cont.)

Product description	Product code	Pack size in ml	Particle size in nm	OD	Gade	Immunoglobulin detected	Host species
Goat Anti Mouse IgM 40nm OD10 5ml	BA.GAMM40/X	5	40	10		Mouse IgM	Goat
Goat Anti Mouse IgM 40nm OD10 100ml	BA.GAMM40/7	100	40	10		Mouse IgM	Goat
Goat Anti Mouse IgM 40nm OD10 500ml	BA.GAMM40/8	500	40	10		Mouse IgM	Goat
Goat Anti Rabbit IgG 10nm 0.25ml	EM.GAR10/1	0.25	10		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 15nm 0.25ml	EM.GAR15/1	0.25	15		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 20nm 0.25ml	EM.GAR20/1	0.25	20		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 40nm 0.25ml	EM.GAR40/1	0.25	40		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 5nm 0.25ml	EM.GAR5/1	0.25	5		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 10nm 1ml	EM.GAR10/2	1	10		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 15nm 1ml	EM.GAR15/2	1	15		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 20nm 1ml	EM.GAR20/2	1	20		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 40nm 1ml	EM.GAR40/2	1	40		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 5nm 1ml	EM.GAR5/2	1	5		EM	Rabbit IgG	Goat
Goat Anti Rabbit IgG 40nm OD10 5ml	BA.GAR40/X	5	40	10		Rabbit IgG	Goat
Goat Anti Rabbit IgG 40nm OD10 100ml	BA.GAR40/7	100	40	10		Rabbit IgG	
Goat Anti Rabbit IgG 40nm OD10 500ml	BA.GAR40/8	500	40	10		Rabbit IgG	
Goat Anti Rat IgG 10nm 0.25ml	EM.GAT10/1	0.25	10		EM	Rat IgG	Goat
Goat Anti Rat IgG 10nm 1ml	EM.GAT10/2	1	10		EM	Rat IgG	Goat

SURFACE MODIFICATION & LABELLING

We offer tools for the functionalization of various surfaces and assay types using our own high-tech molecule Polystreptavidin R, that we developed with exceptional biotin binding capacities. For protein labelling, we also offer recombinant Streptavidin.



Streptavidin & Polystreptavidin R

Product code	Product description	Package size	Category
10 110 010	Recombinant Streptavidin	1 mg	Streptavidin
10 120 100	Polystreptavidin R	1 mg	Polystreptavidin R

Polystreptavidin

Polystreptavidin R is a macromolecule with excellent adsorption properties. Coatings made of Polystreptavidin R combine the excellent biotin binding capacity with a high chemo- and thermostability thereby making your lateral flow test or other assay highly durable.

Due to its macromolecular structure Polystreptavidin R has the ability to simultaneously bind more biotinylated molecules (Figure 1B) than 'classical' Streptavidin (Figure 1A). This leads to signal amplification in various applications (Figure 1C).

Key benefits

- + High thermal stability - Long shelf life > 2 years
- + Ready-to-use - No additional washing or blocking steps required
- + High signal-to-noise ratio
- + Excellent coating properties - even on glass

A

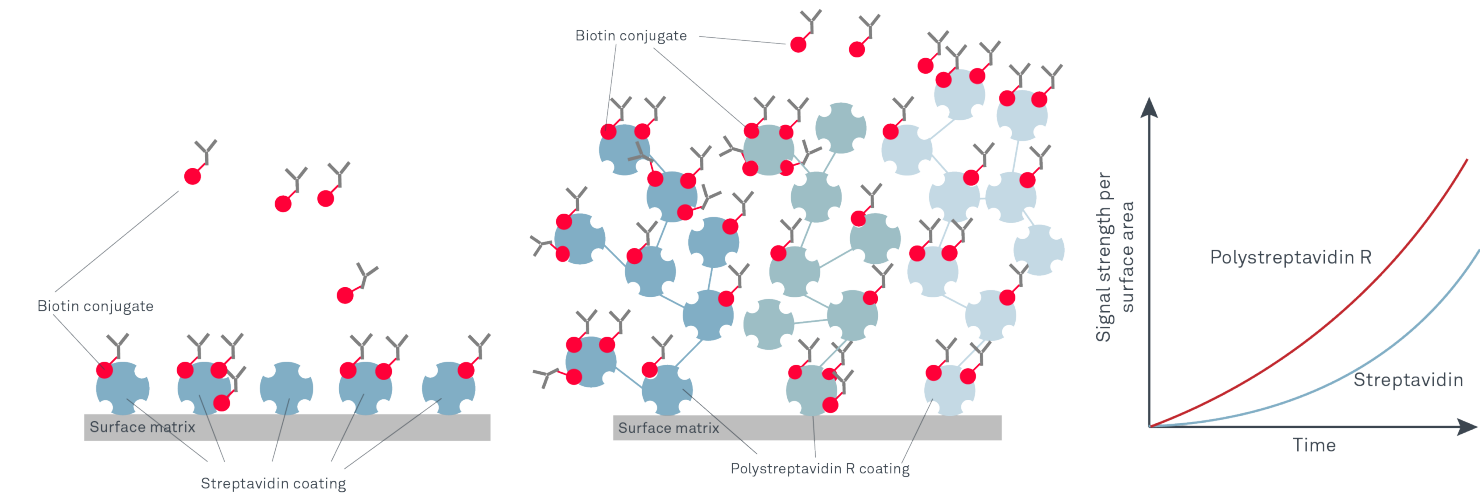


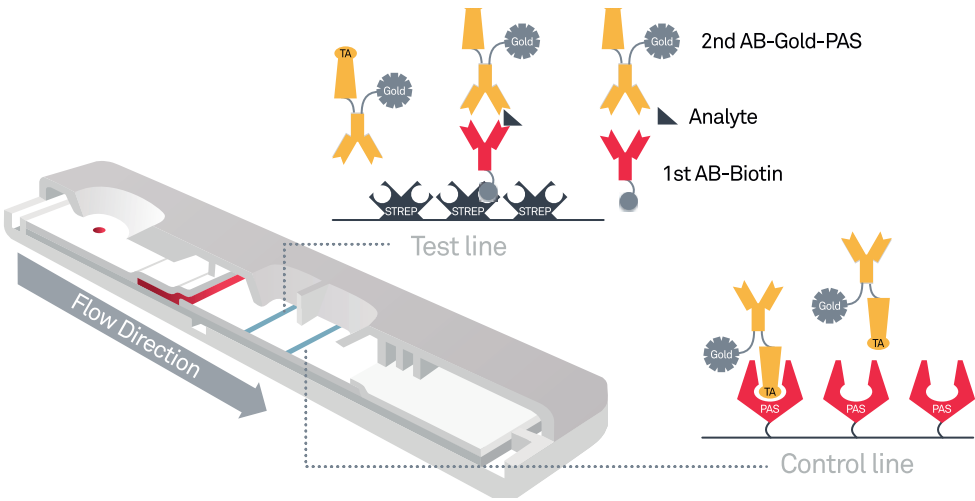
Figure 1

Streptavidin conjugates

Product code	Product description	Package size	Category
20 201 001	Streptavidin Poly-HRP conjugate	100 µl	HRP
20 400 001	Streptavidin FITC conjugate	200 µg	FITC
20 400 010	Streptavidin FITC conjugate	1 mg	FITC

SURFACE FUNCTIONALIZATION WITH BIOTEZ' UNIQUE TAPAS LABELLING SYSTEM

The TAPAS labeling Kit for immobilization, enrichment and detection of biomolecules on lateral flow test and on other assay systems.



TA-PAS system components and kits

Product code	Product description	Package size	System component
12 700 003	PAS Antibody	1 mg	Capture antibody
20 700 001	PAS-Poly-HRP PAS capture antibody conjugated with Poly-HRP		Capture antibody
BTTAP-001	TAPAS Labelling Kit -1 label		Labelling kit
BTTAP-003	TAPAS Labelling Kit -3 label		Labelling kit

CUSTOM CONJUGATION

Our custom conjugation service provides high quality conjugates, optimised to meet your unique quality control requirements. Our experienced scientists work directly with you to provide sensitive, specific, and reproducible conjugates.

The service

- + Develop high quality conjugates using antibodies, antigens, oligos or aptamers provided by you or sourced by us
- + Conjugate to numerous nanoparticles including BBI Solutions' world renowned gold
- + Optimise the sensitivity of your conjugate to meet your pre-agreed requirements and stability
- + Batch production up to 24 litres at OD10, or alternatively we can provide a custom OD preparation

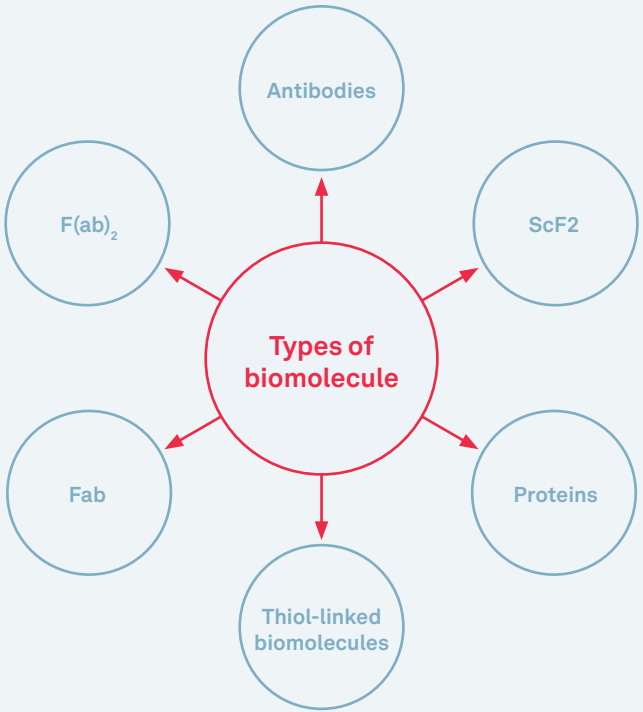
DESIGNED TO MEET YOUR INDIVIDUAL NEEDS

Specificity, sensitivity and reproducibility should define the specification and fulfil your absolute minimum expectations of the conjugate.

Our scientists work in partnership with customers to bring all the vital ingredients together and provide sensitive, stable, reproducible conjugates time after time. Once you are happy with your conjugate, we can put a commercial supply plan in place to ensure security of supply.

Discuss your requirements with our technical team on:

+44 (0)1495 363 000
sales@bbisolutions.com



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The gold and conjugation processes at BBI are unrivalled – we found that BBI was the best that we could work with.

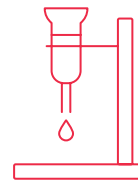
**CEO James Lousararian,
Verax Biomedical**



IMMUNO-AFFINITY PURIFICATION AND PROTEIN EXTRACTION

VITAMINS; MYCOTOXINS; HORMONES; ANTIBIOTICS

For many years, BioTeZ has been offering the successfully tested IAC (Immuno Affinity Chromatography) for mycotoxin and vitamin analysis for food and feed safety assessment. In addition, we also offer ELISAs for the analysis of Mycotoxin contaminations



Affinity purification columns - Mycotoxins

Product code	Product description	Quantity	Category
BTCM326005	B-TeZ IAC Combi AOZDFT for LC-MS/MS (Afla, Ochra, Zeara, DON, Fumo, T2/HT2 in one IAC) - 3 ml		Diverse
BTAf310005	B-TeZ IAC Aflatoxin total Size 3 ml (Mini Pack 10 columns)	10 pack	Aflatoxin
BTAf310030	B-TeZ IAC Aflatoxin total Size 3 ml (Box 30 columns)	30 Pack	Aflatoxin
BTAf310050	B-TeZ IAC Aflatoxin total Size 3 ml (Box 50 columns)	50 Pack	Aflatoxin
BTAf310100	B-TeZ IAC Aflatoxin total Size 3 ml (Box 100 columns)	100 Pack	Aflatoxin
BTAfM311005	B-TeZ IAC Aflatoxin M1 Size 3 ml (Mini Pack 10 columns)	10 pack	Aflatoxin
BTAfM311030	B-TeZ IAC Aflatoxin M1 Size 3 ml (Box 30 columns)	30 box	Aflatoxin
BTAfM311050	B-TeZ IAC Aflatoxin M1 Size 3 ml (Box 50 columns)	50 box	Aflatoxin
BTAfM311100	B-TeZ IAC Aflatoxin M1 Size 3 ml (Box 100 columns)	100 box	Aflatoxin

Affinity purification columns - Mycotoxins (cont.)

Product code	Product description	Quantity	Category
BTOT312005	B-TeZ IAC Ochratoxin Size 3 ml (Mini Pack 10 columns)	10 pack	Ochratoxin
BTOT312030	B-TeZ IAC Ochratoxin Size 3 ml (Box 30 columns)	30 Pack	Ochratoxin
BTOT312050	B-TeZ IAC Ochratoxin Size 3 ml (Box 50 columns)	50 Pack	Ochratoxin
BTOT312100	B-TeZ IAC Ochratoxin Size 3 ml (Box 100 columns)	100 Pack	Ochratoxin
BTZE315005	B-TeZ IAC Zearalenone Size 3 ml (Mini Pack 10 columns)	10 pack	Zearalenone
BTZE315030	B-TeZ IAC Zearalenone Size 3 ml (Box 30 columns)	30 Pack	Zearalenone
BTZE315050	B-TeZ IAC Zearalenone Size 3 ml (Box 50 columns)	50 Pack	Zearalenone
BTZE315100	B-TeZ IAC Zearalenone Size 3 ml (Box 100 columns)	100 Pack	Zearalenone
BTDO313005	B-TeZ IAC Deoxynivalenol Size 3 ml (Mini Pack 10 columns)	10 pack	Deoxynivalenol
BTDO313030	B-TeZ IAC Deoxynivalenol Size 3 ml (Box 30 columns)	30 Pack	Deoxynivalenol
BTDO313050	B-TeZ IAC Deoxynivalenol Size 3 ml (Box 50 columns)	50 Pack	Deoxynivalenol
BTDO313100	B-TeZ IAC Deoxynivalenol Size 3 ml (Box 100 columns)	100 Pack	Deoxynivalenol
BTFU314005	B-TeZ IAC Fumonisin Size 3 ml (Mini Pack 10 columns)	10 pack	Fumonisin
BTFU314030	B-TeZ IAC Fumonisin Size 3 ml (Box 30 columns)	30 Pack	Fumonisin
BTFU314050	B-TeZ IAC Fumonisin Size 3 ml (Box 50 columns)	50 Pack	Fumonisin
BTFU314100	B-TeZ IAC Fumonisin Size 3 ml (Box 100 columns)	100 Pack	Fumonisin
BTTE316005	B-TeZ IAC T2/HT2 Size 3 ml (Mini Pack 10 columns)	10 pack	T2/HT2
BTTE316030	B-TeZ IAC T2/HT2 Size 3 ml (Box 30 columns)	30 box	T2/HT2
BTTE316050	B-TeZ IAC T2/HT2 Size 3 ml (Box 50 columns)	50 box	T2/HT2
BTTE316100	B-TeZ IAC T2/HT2 Size 3 ml (Box 100 columns)	100 box	T2/HT2
BTCA321005	B-TeZ IAC Combi Afla+Ochra Size 3 ml (Mini Pack 10 columns)	10 pack	Afla+Ochra
BTCA321030	B-TeZ IAC Combi Afla+Ochra Size 3 ml (Box 30 columns)	30 box	Afla+Ochra
BTCA321050	B-TeZ IAC Combi Afla+Ochra Size 3 ml (Box 50 columns)	50 box	Afla+Ochra
BTCA321100	B-TeZ IAC Combi Afla+Ochra Size 3 ml (Box 100 columns)	100 box	Afla+Ochra
BTCZ322005	B-TeZ IAC Combi Afla+Ochra+Zeara Size 3 ml (Mini Pack 10 columns)	10 pack	Afla +Ochra +Zeara
BTCZ322030	B-TeZ IAC Combi Afla+Ochra+Zeara Size 3 ml (Box 30 columns)	30 box	
BTCZ322050	B-TeZ IAC Combi Afla+Ochra+Zeara Size 3 ml (Box 50 columns)	50 box	
BTCZ322100	B-TeZ IAC Combi Afla+Ochra+Zeara Size 3 ml (Box 100 columns)	100 box	
BTCD323005	B-TeZ IAC Combi Deoxinivalenol+Zearalenone Size 3 ml (Mini Pack 10 columns)	10 pack	Deoxinivalenol +Zearalenone
BTCD323030	B-TeZ IAC Combi Deoxinivalenol+Zearalenone Size 3 ml (Box 30 columns)	30 box	
BTCD323050	B-TeZ IAC Combi Deoxinivalenol+Zearalenone Size 3 ml (Box 50 columns)	50 box	
BTCD323100	B-TeZ IAC Combi Deoxinivalenol+Zearalenone Size 3 ml (Box 100 columns)	100 box	
BTCM326005	B-TeZ IAC Combi AOZDFT for LC-MS/MS Size 3 ml (Mini Pack 10 columns)	10 pack	Diverse
BTCM326030	B-TeZ IAC Combi AOZDFT for LC-MS/MS Size 3 ml (Box 30 columns)	30 box	Diverse
BTCM326050	B-TeZ IAC Combi AOZDFT for LC-MS/MS Size 3 ml (Box 50 columns)	50 box	Diverse
BTCM326100	B-TeZ IAC Combi AOZDFT for LC-MS/MS Size 3 ml (Box 100 columns)	100 box	Diverse
BTLS327005	B-TeZ IAC Ergotalkaloids Size 3 ml (Mini Pack 10 columns)	10 pack	Ergotalkaloids
BTLS327030	B-TeZ IAC Ergotalkaloids Size 3 ml (Box 30 columns)	30 Pack	Ergotalkaloids
BTLS327050	B-TeZ IAC Ergotalkaloids Size 3 ml (Box 50 columns)	50 Pack	Ergotalkaloids
BTLS327100	B-TeZ IAC Ergotalkaloids Size 3 ml (Box 100 columns)	100 Pack	Ergotalkaloids

IMMUNO-AFFINITY PURIFICATION
AND PROTEIN EXTRACTION

Affinity purification columns - Vitamins

Product code	Product description	Quantity	Category
BTSA317005	B-TeZ IAC Biotin 3 ml		Biotin
BTSA317005	B-TeZ IAC Biotin Size 3 ml (Mini Pack 10 columns)	10 pack	Biotin
BTSA317030	B-TeZ IAC Biotin Size 3 ml (Box 30 columns)	30 Pack	Biotin
BTSA317050	B-TeZ IAC Biotin Size 3 ml (Box 50 columns)	50 Pack	Biotin
BTSA317100	B-TeZ IAC Biotin Size 3 ml (Box 100 columns)	100 Pack	Biotin
BTFS319005	B-TeZ IAC Folic Acid		Folic Acid
BTFS319005	B-TeZ IAC Folic Acid Size 3 ml (Mini Pack 10 columns)	10 pack	Folic Acid
BTFS319030	B-TeZ IAC Folic Acid Size 3 ml (Box 30 columns)	30 box	Folic Acid
BTFS319050	B-TeZ IAC Folic Acid Size 3 ml (Box 50 columns)	50 box	Folic Acid
BTFS319100	B-TeZ IAC Folic Acid Size 3 ml (Box 100 columns)	100 box	Folic Acid
BTCA318005	B-TeZ IAC Vitamin B12		Vitamin B12
BTCA318005	B-TeZ IAC Vitamin B12 Size 3 ml (Mini Pack 10 columns)	10 pack	Vitamin B12
BTCA318030	B-TeZ IAC Vitamin B12 Size 3 ml (Box 30 columns)	30 box	Vitamin B12
BTCA318050	B-TeZ IAC Vitamin B12 Size 3 ml (Box 50 columns)	50 box	Vitamin B12
BTCA318100	B-TeZ IAC Vitamin B12 Size 3 ml (Box 100 columns)	100 box	Vitamin B12

Antibodies - Antibiotics, used in Affinity Purification Columns

Product code	Product description	Quantity
11 310 001	anti-Streptomycin, monoclonal, clone BCAB1331	0.1 mg
11 320 001	anti-Chloramphenicol, monoclonal, clone BCAB1332	0.1 mg

Antibodies - Vitamins, used in Affinity Purification Columns

Product code	Product description	Quantity
11 420 001	anti-Folic Acid, monoclonal, clone BCAB1342	0.1 mg
11 420 010	anti-Folic Acid, monoclonal, clone BCAB1342	1 mg
11 410 001	anti-Vitamin B12, monoclonal, clone BCAB1341	0.1 mg
11 410 010	anti-Vitamin B12, monoclonal, clone BCAB1341	1 mg

Antibodies - Mycotoxins, used in Affinity Purification Columns

Product code	Product description	Quantity
11 110 001	anti-Aflatoxin B1, monoclonal, clone BCAB1310	0.1 mg
11 110 010	anti-Aflatoxin B1, monoclonal, clone BCAB1310	1 mg
11 112 001	anti-Aflatoxin B2, clone BCAB1312	0.1 mg
11 112 010	anti-Aflatoxin B2, clone BCAB1312	1 mg
11 111 001	anti-Aflatoxin B2, monoclonal, clone BCAB1311	0.1 mg
11 111 010	anti-Aflatoxin B2, monoclonal, clone BCAB1311	1 mg
11 113 001	anti-Aflatoxin G1/G2, monoclonal, clone BCAB1313	0.1 mg
11 113 010	anti-Aflatoxin G1/G2, monoclonal, clone BCAB1313	1 mg
11 115 001	anti-Aflatoxin M1 clone BCAB1315	0.1 mg
11 115 010	anti-Aflatoxin M1 clone BCAB1315	1 mg
11 114 001	anti-Aflatoxin total, clone BCAB1314	0.1 mg
11 114 010	anti-Aflatoxin total, clone BCAB1314	1 mg
11 150 001	anti-Deoxynivalenol, monoclonal, clone BCAB1350	0.1 mg
11 150 010	anti-Deoxynivalenol, monoclonal, clone BCAB1350	1 mg
11 140 001	anti-Fumonisin, monoclonal, clone BCAB1340	0.1 mg
11 140 010	anti-Fumonisin, monoclonal, clone BCAB1340	1 mg
11 120 001	anti-Ochratoxin A, monoclonal, clone BCAB1320	0.1 mg
11 120 010	anti-Ochratoxin A, monoclonal, clone BCAB1320	1 mg
11 160 001	anti-T-2 Toxin, monoclonal, clone BCAB1360	0.1 mg
11 160 010	anti-T-2 Toxin, monoclonal, clone BCAB1360	1 mg
11 130 001	anti-Zearalenon, monoclonal, clone BCAB1330	0.1 mg
11 130 010	anti-Zearalenon, monoclonal, clone BCAB1330	1 mg

Antibodies - Hormones, used in Affinity Purification Columns

Product code	Product description	Quantity
11 510 001	anti-Estradiol, monoclonal, clone BCAB1351	0.1 mg
11 510 010	anti-Estradiol, monoclonal, clone BCAB1351	1 mg

Columns - Empty

Product code	Product description
BTIAK-0205	BioTeZ IAC Kit for affinity column preparation, Pre-activated chromatography gel medium incl. empty columns

STABILIZERS / BLOCKERS / DILUENTS



Immunoassay Stabilizers / Blockers*

SC01-1000
1,000 ml

StabilCoat® Immunoassay Stabilizer

+ Effectively preserves the conformation and activity of dried proteins

SC05-1000
1,000 ml

StabilCoat® Immunoassay Stabilizer (5x)

+ 5x concentrate
+ Effectively preserves the conformation and activity of dried proteins

SG01-1000
1,000 ml

StabilGuard® Immunoassay Stabilizer (BSA-Free)

+ Maintains the activity of antibodies and other biomolecules absorbed or immobilised to solid substrates

ST01-1000
1,000 ml

StabilBlock® Immunoassay Stabilizer

+ Minimizes non-specific binding to lower detection limits and maximizes signal-to-noise ratios of immunoassays

ST01-CF01-1000
1,000 ml

StabilBlock® Immunoassay Stabilizer-CMIT/MIT

+ Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative



* Distributed in Europe only

Stabilizers for Microarray Slides and Microsphere-Based Assays*

SC02-1000
1,000 ml

StabilCoat® Plus Microarray Stabilizer

+ Improves the stability of proteins bound to microspheres stored in solution, and array proteins stored in the dried state

SG02-1000
1,000 ml

StabilGuard® Choice Microarray Stabilizer (BSA-Free)

+ Improves the stability of proteins bound to microspheres stored in solution, and array proteins stored in the dried state

Protein and Conjugate Stabilizers*

SA01-1000
1,000 mL

StabilZyme® AP Conjugate Stabilizer

+ Developed specifically for Alkaline Phosphatase (AP) conjugates in solution

SA01-CF01-1000
1,000 mL

StabilZyme® AP Conjugate Stabilizer-CMIT/MIT

+ Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative

SAPF-1000
1,000 ml

StabilZyme® Protein-Free AP Stabilizer

+ Optimized to prevent the loss of Alkaline Phosphatase (AP) activity while maintaining the conformational structure and binding efficacy of the conjugated antibody

SZ02-CF02-1000
1,000 ml

StabilZyme® HRP Conjugate Stabilizer

+ Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative

SAPF-1000
CF01-1000
1,000 ml

StabilZyme® Protein-Free AP Stabilizer-CMIT/MIT

+ Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative

SZ03-1000
1,000 ml

StabilZyme® SELECT® Stabilizer

+ Stabilises biologically active components in solution and protects the activity of proteins commonly used in immunoassays, such as antisera and controls and HRP conjugates

* Distributed in Europe only

Protein and Conjugate Stabilizers*

SZ02-1000 1,000 ml	StabilZyme® HRP Conjugate Stabilizer + Developed specifically for Horseradish Peroxidase (HRP) conjugates in solution	SZ03-CF02-1000 1,000 ml	StabilZyme® SELECT® Stabilizer-CMIT/MIT + Newly developed formulation containing a mixture of 5-Chloro-2- Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative
SZ04-1000 1,000 ml	StabilZyme® NOBLE Stabilizer (BSA-Free) + Designed for conjugated proteins, antibody-coated particles, and unmodified proteins in solution	SZPF-1000 1,000 ml	StabilZyme® Protein-Free Stabilizer + Designed for conjugated proteins, antibody-coated particles and unmodified proteins in solution + Delivers top performances in a protein-free formulation
SZ04-CF02-1000 1,000 ml	StabilZyme® NOBLE Stabilizer (BSA-Free)-CMIT/MIT + Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative	SZPF-CF01-1000 1,000 ml	StabilZyme® Protein-Free Stabilizer-CMIT/MIT + Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3(2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative

* Distributed in Europe only



StabilBlot™ Blockers*

SB01-1000-01 1,000 ml	StabilBlot™ Protein-Free Blocker + Ready to use + The absence of protein in the formulation provides a synthetic alternative that eliminates cross-reactivity and increases sensitivity	SB05-0125-01 125 ml SB05-1000-01 1,000 ml	StabilBlot™ Casein Blocker (5X, TBS) + 5x concentrate + For strong blocking of background, a casein TBS and a casein PBS formulation are available
SB04-0125-01 125 ml SB04-1000-01 1,000 ml	StabilBlot™ Milk Blocker (10x) + 10x concentrate + For the strongest blocking, the milk formulation is recommended		

* Distributed in Europe only

Blockers and Diluents*

PBSC 100 ml 1,000 ml	Phosphate Buffered Saline/Casein Block and Diluent + 5x concentrate + High blocking efficiency of casein minimizes non-specific interactions of the secondary reactants with unwanted binding sites	MLKB 100 ml 1,000 ml
TBSC 100 ml 1,000 ml	Tris Buffered Saline/Casein Block and Diluent + 10x concentrate + High blocking efficiency of casein minimizes non-specific interactions of the secondary reactants with unwanted binding sites	

Sample / Assay Diluents*

SM01-1000 1,000 ml	Surmodics® Assay Diluent (Protein-Free) + Surmodics® Assay Diluent reduces matrix interference in samples including heterophilic antibodies, such as HAMA and RF	SM02-1000 1,000 ml
SM01-CF02-1000 1,000 ml	Surmodics® Assay Diluent (Protein-Free)-CMIT/MIT + Newly developed formulation containing a mixture of 5-Chloro-2-Methyl-3 (2H)-isothiazolone and 2-Methyl-3(2H)-isothiazolone as preservative	MatrixGuard™ Diluent + Provides unsurpassed blocking whereby matrix interferences are effectively blocked while the intended assay signal is maintained

* Distributed in Europe only

IMMUNOASSAY SUBSTRATES



TMB and ABTS HRP Microwell Substrates*

TMBDH-1000-01 1,000 ml	TMB High Definition One Component HRP Microwell Substrate + Our newest TMB formulation + Up to 30% more sensitive than TMBS	TMBC-1000-01 1,000 ml**	TMB Conductivity One Component HRP Microwell Substrate + As robust as TMBW + Formulated specifically for liquid level detection systems on instruments + Up to 10% more sensitive than TMBW
TMBS-1000-01 1,000 ml**	TMB Super Sensitive One Component HRP Microwell Substrate + Up to 40% more sensitive than TMBW	TMSK-1000-01 1,000 ml**	TMB Slow Kinetic One Component HRP Microwell Substrate + A slower kinetic formulation to allow a wider dynamic/working range without compromising assay performance + Up to 25% less sensitive than TMBW
TMBW-1000-01 1,000 ml**	TMB One Component HRP Microwell Substrate + Our most popular formulation + Suitable for use in virtually every quantitative or qualitative test		

* Distributed in Europe only ** Bulk and custom fills on request



TMB and ABTS HRP Microwell Substrates*

TTMB-1000-01 1,000 ml**	TMB Super Slow One Component HRP Microwell Substrate + Up to 35% less sensitive than TMBW without compromising assay performance	TMBX-1000-01 1,000 ml**	TMB Extended Range HRP Microwell Substrate + Our slowest kinetic option for extended dynamic range and improved reproducibility
TMDS-1000-01 1,000 ml**	TMB Double Slow One Component HRP Microwell Substrate + A doubly slow kinetic option for consistent results + Up to 60% less sensitive than TMBW	ABTS-1000-01 1,000 ml**	ABTS One Component HRP Microwell Substrate - Extended Shelf Life + Three year stability while offering the sensitivity needed for your ELISA assays + Much more stable background compared to standard ABTS formulations

TMB HRP Membrane Substrates*

ESPM-1000-01 1,000 ml**	TMB Enhanced One Component HRP Membrane Substrate + Room temperature stability for 2 years, stable for 4 years at 4°C + Similar sensitivity to most mid-to high-level chemiluminescent membrane substrates + Extended dynamic range with reduction of wash-out at higher peroxidase concentrations	TMBM-1000-01 1,000 ml**	TMB One Component HRP Membrane Substrate + A high quality and economical precipitating TMB option for Western blotting and other membrane applications
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* Distributed in Europe only ** Bulk and custom fills on request

AP Microwell Substrates*

PNPS-1000-01 1,000 ml**	AP-Yellow One Component Microwell Substrate (pNPP) with Stabilizing Pellets + No spontaneous colour change + Long shelf life
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AP Membrane Substrates*

BCIB-1000-01 1,000 ml**	BCIP/NBT Blue One Component AP Membrane Substrate + Blue precipitate + No unpredictable colour change + Improved sensitivity with low background	BCID-1000-01 1,000 ml**	BCIP/NBT Purple One Component AP Membrane Substrate + Purple precipitate + No unpredictable colour change + Improved sensitivity with low background
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ACCESSORY REAGENTS

Wash and Coating Solutions

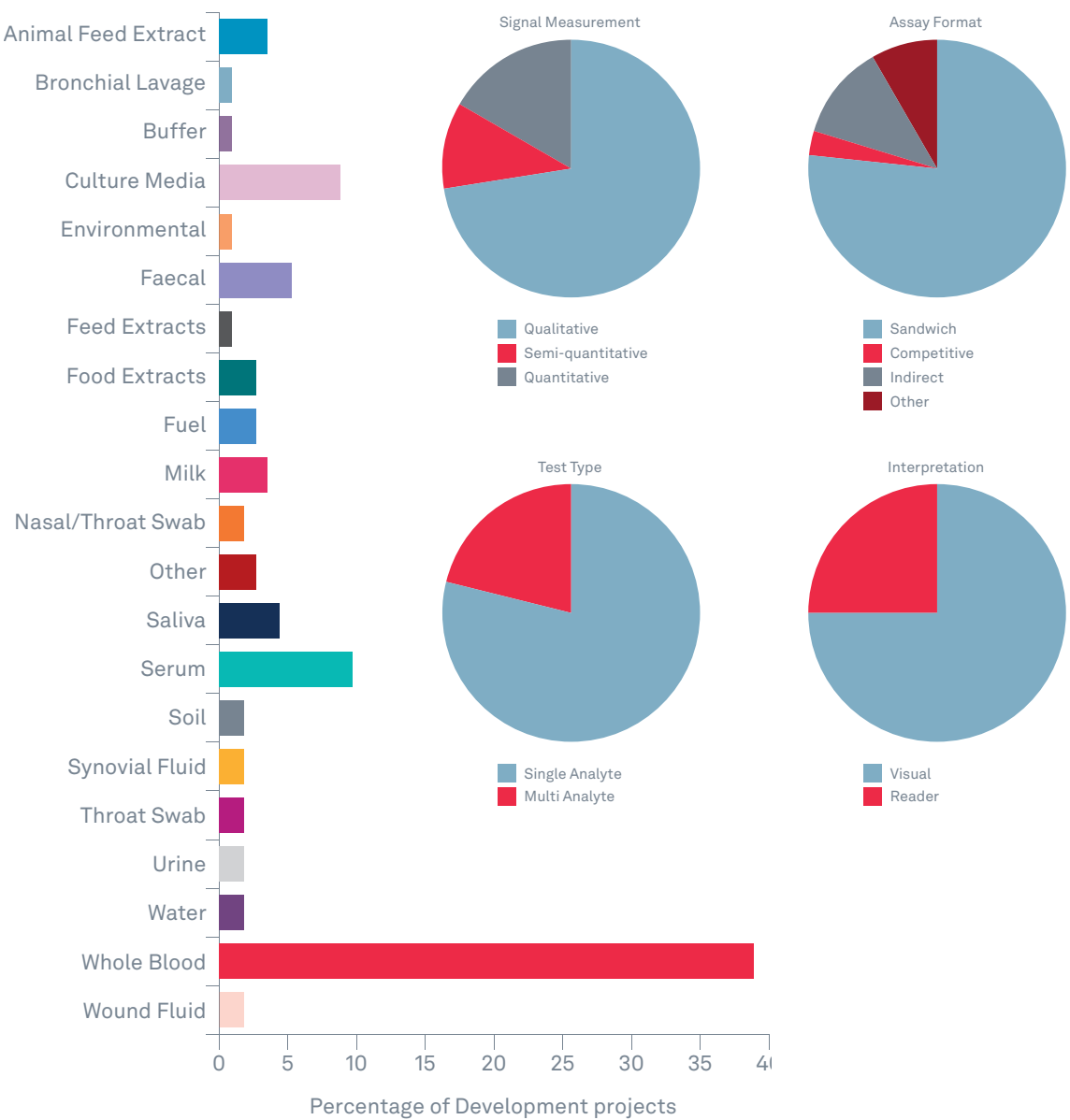
WSHW 100 ml 1,000 ml	Tris Buffered Saline Wash Solution + 10x concentrate + Performs stable blocking once applied and reduces non-specific binding + Improved sensitivity with low background	COAT 100 ml 1,000 ml	ELISA Plate Coating Solution + Purple precipitate + Physiological saline solution, maximizes specific binding to the target solid phase by providing optimal pH and ionic strength in ELISA systems
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* Distributed in Europe only ** Bulk and custom fills on request

LATERAL FLOW ASSAY DEVELOPMENT

Are you looking to outsource your lateral flow test development? At BBI Solutions we understand that getting a fast, accurate result is critical.

Our capabilities
Our capabilities allow us to take assay development from initial antibody screening through to final manufacture and beyond. We have over 25 years' experience developing more than 250 qualitative, semi quantitative and quantitative assays.



Market segments

Our experience has been gained across multiple sectors including:

- + Human Clinical
 - Lab based
 - Point of care
 - Remote
- + Agricultural
- + Animal Diagnostics
- + Environmental
- + Drugs of Abuse
- + Food Safety
- + Defence
- + Consumer Healthcare

Within the human clinical IVD marketplace we have experience of working with multiple analytes including; HIV, TB, Flu A and B, Calprotectin, Legionella and Progesterone. In addition, we have developed over 25 biodefence assays for a variety of customers.

A dedicated cross-functional team of scientists works exclusively on all phases of your project from Feasibility, Optimisation, to Verification and Validation. At the end of the development cycle, we will hand over the design history file so that you fully 'own' your test. Depending on the complexity of the assay, a typical development programme for a standard IVD will work as follows:

A typical project plan*

	1 MONTH	5 MONTHS	5 MONTHS	4 MONTHS	
PHASE	Proof of principle	Feasibility	Optimisation and characterisation	Validation	Manufacture
ACTIVITY	Exploration of initial idea and theoretical viability	Collating customer requirements and investigation of formulations and processes	Characterisation and selection of final materials, formulation and processes. Transfer to manufacture	Full verification and validation of manufacturing processes to ensure assay robustness	Opportunity to implement manual, semi automated or automated solutions (scale dependent)
DELIVERABLES	+ Clear pathway identified	+ A prototype assay	+ An optimised assay and pilot batches	+ A prototype assay	+ A prototype assay

* Representative

LATERAL FLOW ASSAY MANUFACTURE

Robust and flexible manufacturing options

You may be a new start-up company looking for someone to manufacture your assay, or a fast growing company under pressure to meet increasing demand. Our manufacturing service will deliver the results you need to fulfil your customer's expectations:

KEY BENEFITS

- + **Flexible options** – catering for increased demand and technically challenging manufacture
- + **Technical transfer to manufacturing** – BBI has extensive experience and expertise in successfully transferring IVD products to manufacturing
- + **Competitive product pricing** – using our automation capabilities to manufacture on a large scale will drive production costs down without compromising quality
- + **Quality system certification** – we're certified to the world recognised Quality System for Medical Device and IVD Manufacturers, ISO 13485 and have experience working on FDA projects



OUR PREFERRED PARTNERS - OFFERING THE FULL SERVICE SOLUTION TO OUR CUSTOMERS

Novarum - What does their Smartphone Technology Offer?

Novarum leverages mobile connectivity and intuitive app development to transform a smartphone into a point of care work flow management platform that enhances the value of lateral flow at the point of care. Using Novarum™ patented image capture technology provides confidence in test results and prevents user errors by providing clear guided step-by-step instructions. Simple, efficient and accurate testing to empower end-users. This next generation technology can help address the key issues required to achieve CLIA waiver status, making your test more widely available and increasing your market share, at the same time as creating better patient outcomes.



Atomo Diagnostics - Lateral flow housing advanced

By combining the offering of Atomo's unique fully integrated rapid test platforms with BBI's deep expertise in lateral flow assay development, manufacturing, and digital app solutions, the parties are able to build on their successful existing partnership. The non-exclusive agreement will allow both parties to offer full design, development and production solutions to those looking to bring new tests to market, and expand existing portfolios, as the rapid diagnostics market continues to grow and evolve post-pandemic

For more information, please visit: <https://www.atomodiagnostics.com/>



BioAglytix - Pharma

BioAglytix is the trusted partner for bioanalytical services throughout every phase of the drug development process. As a leading global bioanalytical laboratory, the company provides established and emerging pharmaceutical and biotechnology organizations with pharmacokinetic (PK), immunogenicity, biomarker, and CMC bioanalytical testing services in a GxP environment. BioAglytix maintains state-of-the-art laboratories in Durham, North Carolina; Boston, Massachusetts; San Diego, California; Melbourne and Brisbane, Australia; and Hamburg, Germany.

For more information, please visit: www.bioaglytix.com

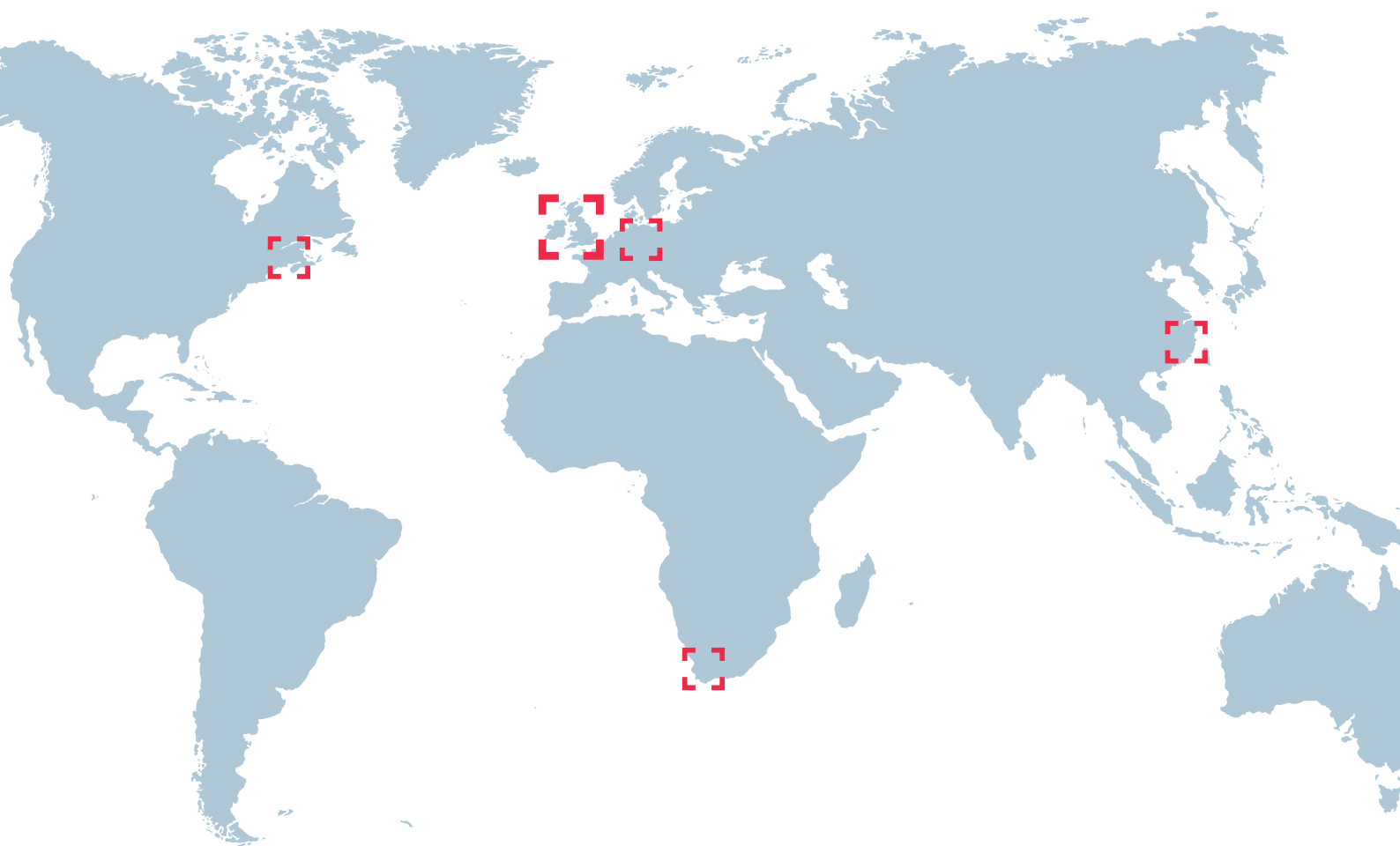
KEY BENEFITS



Seamlessly integrated services - for a streamlined experience for our customers



Excellent expert support through all phases of a project from the beginning on



**Get in touch to arrange a sample
or find out more about any of our
products and services**

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