

HIV-1 P24 MONOCLONAL ANTIBODIES

Abbreviation	p24
Specificity	Detects HIV-1 p24 (Capsid Protein – CA)
Accession Number	P03367 (aa 133-363)
Host Species	Mouse

RECOMMENDED PAIRS

ELISA:

MAB249P capture w/MAB246P detector MAB247P capture w/MAB248P detector

Application	Tested in sandwich ELISA, lateral flow and western blot
Target Marker	HIV p24 is the structural core protein of HIV. The p24 protein, also known as the capsid protein "CA", is heavily involved in viral infection and is an important diagnostic marker. Tests that combine the detection of p24 with serological detection of human anti-HIV-1 p24 antibodies shorten the post-infection test window to approximately 2 weeks.
References	Alexander TS (2016) "Human Immunodeficiency Virus Diagnostic Testing: 30 years of Evolution" Clin Vaccine Immunol. Vol 23 (4): 249–253.

WHY CHOOSE BBI'S HIV-1 p24 ANTIBODIES?

- + Be confident in your results when you choose BBI's HIV-1 p24 antibodies for your next assay:
 - · Developed and screened for performance and available exclusively from BBI Solutions
 - · Multiple matched pairs with distinct binding profiles
 - · Performance demonstrated in ELISA and lateral flow
 - · Complementary reagents available recombinant antigen and patient samples
- + cGMP* production and quality management for increased batch-to-batch consistency
- + Customised production conditions and gold conjugations are available on request

^{* 21} CFR part 820, for research and in-vitro use only



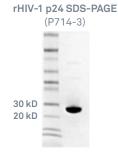
Development

Recombinant HIV-1 p24 (P714-3) was used as the immunogen to generate over 100 antibody candidates. Careful matched pair screening of monoclonal antibodies resulted in four clones with sensitive and diverse binding characteristics to both recombinant HIV-1 p24 (heat map shown below) and native HIV-1 p24.

MAB Matched Pair Evaluation w/rHIV-1 p24

	MAB246P	MAB247P	MAB248P	MAB249P
MAB246P	-	++	++	++
MAB247P	+++	-	+++	+++
MAB248P	++	+++	-	+
MAB249P	++++	++++	+	+

Colorimetric sandwich ELISA utilising unconjugated capture antibody (left-hand column) paired with biotinylated detection antibody (top row). The antigen used was recombinant HIV-1 p24 at 2.5 ng/mL.



Non-reduced SDS-PAGE, $8\mu g$ load

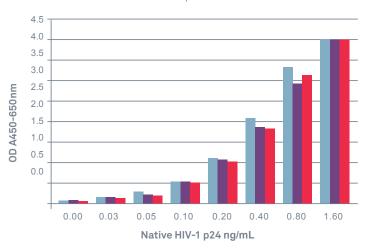
Characterisation

Sandwich ELISA

HIV-1 p24 antibodies were tested in colorimetric sandwich ELISAs and sensitive matched pair combinations identified.

Standard Curves of Matched Pairs in a Native HIV-1 p24 Sandwich ELISA

- MAB249P capture / MAB246P detector
- MAB247P capture / MAB248P detector
- MAB249P capture / MAB247P detector



Pack sizes

1mg, bulk amounts available on request.

ORDERING DETAILS - USE THE FOLLOWING CODES WHEN ORDERING

Product	Code	Description
HIV-1 p24 Monoclonal Antibody	MAB246P	Detection antibody in sandwich ELISA with MAB249P as the capture antibody. Suitable for lateral flow.
HIV-1 p24 Monoclonal Antibody	MAB247P	Capture antibody in sandwich ELISA with MAB248P as the detection antibody. Detection antibody in sandwich ELISA with MAB249P as the capture antibody.
HIV-1 p24 Monoclonal Antibody	MAB248P	Detection antibody in sandwich ELISA with MAB247P as the capture antibody. Suitable for lateral flow.
HIV-1 p24 Monoclonal Antibody	MAB249P	Capture antibody in sandwich ELISA with either MAB246P or MAB247P as the detection antibody. Suitable for lateral flow.

	Related Products	Code	Description
- + + + + +	Recombinant HIV-1 p24 Antigen	P714-3	>96 % pure via SDS-PAGE, supplied in liquid format from E.coli. Full-length sequence of HIV-1 p24 with an N-terminal methionine followed by 10x histidine tag.
+ + + +	HIV-1 / HIV-2 Disease State Plasma	SH315 / SH316	Disease state plasma/serum positive for HIV-1 (SH315) or HIV-2 (SH316).