

# **TRYPSIN**

### What is Trypsin?

Trypsin is widely distributed in animals and in some bacteria and is classed as a serine protease. Trypsin is present in the pancreas and pancreatic juice in vertebrates. Trypsinogen, secreted into the duodenum as a pro-enzyme, is activated by Enterokinase secreted by the duodenal mucosa. Trypsin is obtained by activation of its inactive precursor (Trypsinogen) by Enterokinase and by Trypsin itself. Calcium stimulates the autoactivation of Trypsinogen.

Trypsin has a high degree of substrate specificity as it catalyses the hydrolysis of peptide bonds on the carboxyl terminus of positively charged amino acids such as Lysine and Arginine. Trypsin has a weak action on native proteins and will not hydrolyze serum globulins, haemoglobin, ovalbumin or collagen.

### Why choose BBI for your supply?

BBI Solutions (BBI) is a leading manufacturer of high quality Trypsin.

Our team in Cape Town has manufactured Trypsin for over 40 years, under a quality system compliant with the latest ISO 13485:2016 standard requirements.

Using our expertise in bulk extraction and protein purification we achieve exceptional quality, making BBI the supplier of choice.



### **Product Analysis**

Aspect	Description	Units	Limits	Result
Preparation	Bovine pancreas	N/A	N/A	N/A
Activity	Trypsin	U/mg	<u>≥</u> 2500	3694
Additional Data	Loss on drying	% m/m	<5.0	0
Solubility	Deionised water	50 000 U/ml	Soluble	Complies

## **Key Benefits**

# + HIGHEST QUALITY MATERIAL

Well controlled processes to ensure the highest quality material

# + BATCH-TO-BATCH REPRODUCIBILITY

Enabling consistent performance

#### + EDQM CERTIFIED

We maintain a Certificate of Suitability for TSE/BSE Risk Management issued by the EDQM for materials derived from bovine raw material

# + BULK EXTRACTION CAPABILITY

We are able to offer large volumes to your extract product specification

#### + SECURE SUPPLY

We have direct relationships with our raw material suppliers to ensure a secure supply chain

#### + COST EFFECTIVE

Bovine trypsin offers a cost effective alternative to recombinant products





Code	201553BBI
Purity	≥2500 U/mg
Source	Bovine pancreas
Presentation	White to off-white, salt-free, freeze-dried powder

**Stability** Stable for 3 years when stored in accordance with storage conditions.

#### **FAQs**

#### HOW IS TRYPSIN PRODUCED?

Trypsin is extracted from bovine pancreas and pancreatic juices and is purified by multiple precipitation, fractionation, filtration and crystallization steps.

# CAN YOU SUPPLY MIXTURES OF TRYPSIN AND CHYMOTRYPSIN?

We have standard preparations of Trypsin:-Chymotrypsin mixtures at different ratios of 6:1 and 1:1.

# ARE CUSTOMISED PRODUCT SPECIFICATIONS AVAILABLE?

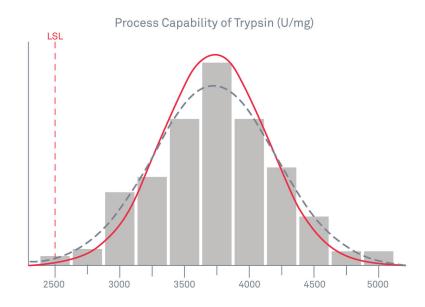
We will profile your requirements against our process capability to meet a specification suitable to your needs. If your product specification falls outside our process capability, the project will be handled by our R&D department.

### HOW SHOULD THE MATERIAL BE STORED?

We recommend you store the material at freezer conditions (-20°C).

### **Product Analysis**

High quality final product produced with a high degree of batch-to-batch consistency:



#### **Related Products**

Application Area	Product Name	Code	Activity
Bulk Enzymes	Chymotrypsin	031110BBI	>5µKatal/mg material
Bulk Enzymes	Ribonuclease	181515BBI	> 100 U/mg material
Bulk Enzymes	Deoxyribonuclease	041160BBI	> 2500 U/mg material
Bulk Enzymes	Trypsin:Chymotrypsin 1:1	161903BBI	>1000:>1000 U/mg material
Bulk Enzymes	Trypsin:Chymotrypsin 6:1	161905BBI	2200-2760:365-460 U/mg material

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