

★ Storage

Store at -20°C. **Protect from moisture.**

Stable up to 6 months when stored at 2-8°C after reconstitution.

Freeze at -20°C for long term storage.

Contents

- Product Manual
- Trypsin, Mass and Sequencing grade

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Shipping Condition

Ship on ice pack and dry ice.

★ Description

Trypsin is a pancreatic serine protease with substrate specificity based upon positively charged lysine and arginine side chains. It is derived from a 34kDa inactive precursor zymogen, trypsinogen, after enzymatic removal of an n-terminal 6-amino acid leader sequence resulting in the 23.8kDa trypsin molecule. The optimum pH is 8.0. Trypsin is inhibited by organophosphorus compounds such as diisopropylfluorophosphate and natural inhibitors from pancreas. Soybean, lima bean, and egg white are also source of natural inhibitors. Trypsin cleaves amide and ester bonds of Arg and Lys. The GenDEPOT's Sequencing Grade Trypsin is treated with L-(tosylamido-2-phenyl) ethyl chloromethyl ketone to inhibit contaminating chymotryptic activity, chemically modified to promote stability and further purified to remove autolysis fragments, resulting in a highly stable trypsin product resistant to autolysis while retaining specificity.

★ Source

Bovine Pancreas

★ Reconstitution

Recommend reconstitution in 1mM HCl, usually at a concentration of 1ug/ul.

Note: Other buffers and concentrations are possible depending on the application.

★ Working concentration

Typically at a ratio of 1/100 to 1/20, the ratio is enzyme to protein by weight. The calculated amount is added to the protein to be digested.

★ Uses

GenDEPOT's modified sequencing grade trypsin is typically used for protein sequencing, mapping and structure studies and subjected to extensive purification to remove contaminating proteases and tryptic autolysis by-product which could affect the specificity of the digestion process. Subsequently the enzyme is chemically modified to minimize the autolysis process as well as increase the stability. The modified trypsin is processed further to remove residual autodegradation products. The specificity of the enzyme is routinely checked after the chemical modification.

★ Unit Definition

One unit releases folin positive amino acids equivalent to 1 mole tyrosine from casein per minute at 37°C, pH 7.6

Parameter	Result	Acceptance Criteria
u/mg P	6.4	≥ 4 units per mg protein
resist. to autolysis, 3 hrs	92%	≥ 80%
resis. to autolysis, 24 hrs	93%	≥ 60%
SDS-PAGE	Satisfactory	Satisfactory
U/mg P TAME	200	≥ 150 units per mg protein TAME