



User Manual for Trypsinase Recombinant Bovine Trypsin



Introduction of Trypsin Recombinant Bovine Trypsin

Trypsin (EC 3.4.21.4) is a serine protease that exists in the digestive system of many vertebrates and functions as a digestive enzyme. In the pancreas, it serves as a precursor for enzymes, and inactive trypsinogen is synthesized. It can cleave the carboxyl end peptide chains in lysine or arginine residues (except for proline at the carboxyl end), and is widely used in a large number of biotechnology processes, known as "trypsin hydrolysis" or "trypsinization". In addition, proteins that have been hydrolyzed or treated with trypsin are referred to as trypsinized proteins. In the process of cell culture, trypsin is a key reagent for the digestion of adherent cells.

Characterization of Trypsin Recombinant Bovine Trypsin

Item	Description
Origin of Sequence	Bovine
Appearance	white crystalline powder
molecular weight	23kDa
Purity (RP-HPLC)	≥90%
Specific activity	≥200 units/mg
Endotoxin	<10 EU/mg
Residual amount of exogenous DNA	<10 ng/mg
Microbial limit	<100 cfu/g

Activity unit: Define as 1 unit by 30°C, pH8.1, reaction system 3.0 ml (1cm optical path), Enzymatic hydrolysis of TAME per minute increases the absorption value at 253nm by 0.001

Main Application:

1. Industrial production of third-generation insulin;
2. Trypsin has considerable specificity, only hydrolyzing peptide bonds at the carboxyl end of arginine or lysine residues;
3. In the biological research experiments of proteomics, proteases are hydrolyzed into peptides and subjected to mass spectrometry analysis, such as endonuclease cleavage;
4. Dissolve micro thrombi and treat pancreatitis.

Solubility

Soluble in water, insoluble in ethanol, glycerol, chloroform, and ether

Storage and validity

Store at 4 °C for about a year (after packaging according to dosage, store at -20 °C or -80 °C for longer periods of time to avoid repeated freeze-thaw). Dry powder can be stored at -20 °C to -80 °C for 10 years

