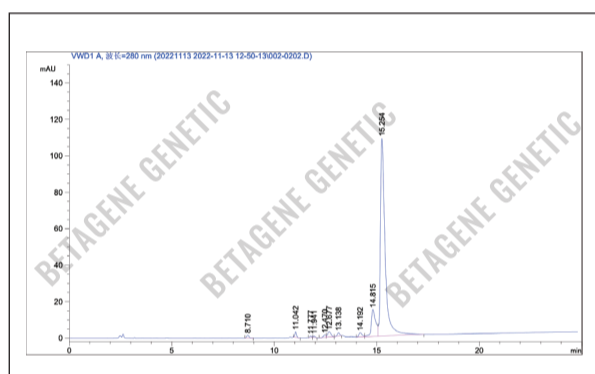




Recombinant Trypsin(Porcine Sequence) GMP

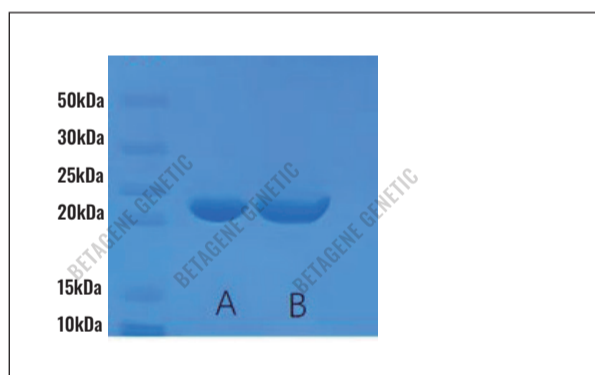
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder and sterile clear, colorless liquid
Description	Trypsin is a major proteolytic enzyme, synthesized as a proenzyme by pancreas and is stored as proenzyme trypsinogen in secretory granules. Trypsin belongs to the family of serine proteases that are characterized by the catalytic triad His57, Asp102 and Ser195. Trypsin is routinely used in proteomics research for peptide mapping and protein sequence work due to its highly specific cleavage resulting in a limited number of tryptic peptides. Trypsin is a pancreatic serine endoprotease which hydrolyzes peptide bonds specifically at the carboxyl side of arginine and lysine residues. The rate of hydrolysis is slower if an acidic residue is on either side of the cleavage site and cleavage may not occur if a proline residue is on the carboxyl side. The enzyme also exhibits esterase and amidase activities.
Catalog Number	GA04.1(liquid)/GA04.2/GA04.3/GA04.4/GA04.5
Specs	1mL(10mg/mL)/500mg/10mg/100mg/1000mg
Source	E. coli
Molecular Weight	23.29kD
Purity	β-trypsin≥70%, α-trypsin≤20%
Biological Activity	≥ 3800U/mg (One USP Unit will produce an A253nm of 0.003 per minute with BAEE as substrate at pH7.6 at 25°C in a reaction volume of 3.2mL)
Host Cell DNA	<0.02 ng/μg of protein tested by DNA Fluorescent Staining method.
Host Cell Protein	<0.5 ng/μg of protein tested by ELISA.a
Formulation	20MM CaCl ₂ , 10MM HCl, pH2±0.5
Sterility	Negative
Endotoxin	< 0.5 EU/100U as determined by TAL method.
Mycoplasma	Negative
In Vitro Virus Assay	Negative
Reconstitution	Before use this product, please read the direction below carefully. 1. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. 2. Reconstitute in a sterile aqueous buffer to an appropriate concentration. 3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Stability & Storage	12 months from date of receipt, the product should be stored ≤-20°C. Please avoid repeated freeze-thaw cycles after reconstitution.
Shipping	The product is shipped with dry ice(liquid) or wet ice (powder). Upon receipt, store it immediately at the temperature recommended.

DATA



Bioactivity of Recombinant Trypsin (Porcine Sequence) HPLC

HPLC analysis of Recombinant Trypsin (Porcine Sequence, rPT). The major peak corresponds to the β-trypsin, which accounts for >80% of rPT. The minor peak to the left corresponds to the α-trypsin, a degraded trypsin chain from β-trypsin, which accounts for <20% of rPT. The α-β ratio complied with According to Pharmacopoeia of the People's Republic of China.



Bioactivity of Recombinant Trypsin (Porcine Sequence) SDS-PAGE

2 μg/lane of Recombinant Trypsin (Porcine Sequence, rPT) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing R and NR bands at 23.29kDa.

CONTENTS

Product	Cat. No.	Amount	Storage	Shelf life
BETAGENE rPT Liquid (GMP-Grade)	GA04.1	1mL (10mg/mL)	≤-20°C	24 months
BETAGENE rPT, Lyophilized Powder (GMP-Grade)	GA04.2 GA04.3 GA04.4 GA04.5	500mg 10mg 100mg 1000mg	≤-20°C	24 months

USAGE

For cell culture

1. Tissue block digestion, primary cell acquisition;
2. Passage digestion of adherent cells;
3. Cell culture by microcarrier method;
4. Gently digesting stem cells;
5. Immune cell therapy, etc.

For recombinant protein

1. Recombinant insulin production;
2. Protein sequencing, peptide mapping;
3. Specific proteolytic processes such as proteomics research.

LIMITED WARRANTY

BETAGENE™ Genetic and/or its affiliate(s) warrant their products as set forth in the BETAGENE Genetic' General Terms and Conditions of Sale. If you have any questions, please contact our staff at SALES@betagene.com.

SOLUTION PREPARATION

1. Melt BETAGENE™ rPT at room temperature, take an appropriate amount of rPT according to the protein content of COA, and add HBSS equilibration solution (or other buffer suitable for cell digestion). If necessary, add EDTA to a final concentration of 0-1mM. Do not exceed 2 mM). The recommended rPT concentration is about 0.1-0.3mg/mL (concentration adjusted according to different cells);
2. Filter rPT solution with 0.22 μm and transfer it to a sterile container;
3. The filtered rPT solution should be used directly as required on the day (for example, adding 1mL to T25 bottles, digesting cells at 37 °C), and the liquid can be stored at 2-8 °C for 1-2 weeks.
4. Store the digestion solution prepared at -20 °C for long term.

The information in this guide is subject to change without notice.

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