

APA250Po51 100µg

Active Trypsin (TRY)

Organism Species: *Sus scrofa*; *Porcine (Pig)*

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.

Host: CHO

Residues: Phe1~Asn231

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 7.0

Predicted Molecular Mass: 25.4kDa

Accurate Molecular Mass: 27kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.6) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were

observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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FPTDDDDKIVGGYTCANSSIPYQVSLNSGSHFCGGSLINSQWVWSAAHCYKSRIQVRLGEHNIDVLEGNEQFINAAKIITHPNFNGNT  
LDNDIMLIKLSPPATLNSRVATVSLPRSCAAAGTECLISGWGNTKSSGSSYPSSLQCLKAPVLSOSSCKSSYPGQITGNMICVGFLEG  
GKDSCQGDSSGGPVVCGQLQGIVSWGYGCAQKNKPGVYTKVCNVVNWIIQQTIAAN
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[ACTIVITY]

Trypsin is a serine protease from the PA clan superfamily, found in the digestive system of many vertebrates, where it hydrolyzes proteins. Trypsin cuts peptide chains mainly at the carboxyl side of the amino acids lysine or arginine. It is used for numerous biotechnological processes. The connection between animal cells is a specific connection formed by the differentiation of the plasma membrane (cell membrane) between adjacent cells. The plasma membrane is mostly composed of protein-lipid-protein unit membrane, and the proteins on the plasma membrane are mostly involved in the connection. Thus, the digestion of adherent cells HepG2 was to detect the bioactivity of recombinant pig trypsin. HepG2 cells were seeded into 96-well plates at a density of 4,000 cells/well with 10% serum standard DMEM overnight. Various concentrations of recombinant pig trypsin was added into the HepG2 after washed by PBS buffer. Cells were observed by inverted microscope after a period of time cultured at 37 °C. The result was shown in Figure 1. It was obvious that recombinant pig trypsin can digest the HepG2, the minimum protein concentration was 46.9 ug/ml.

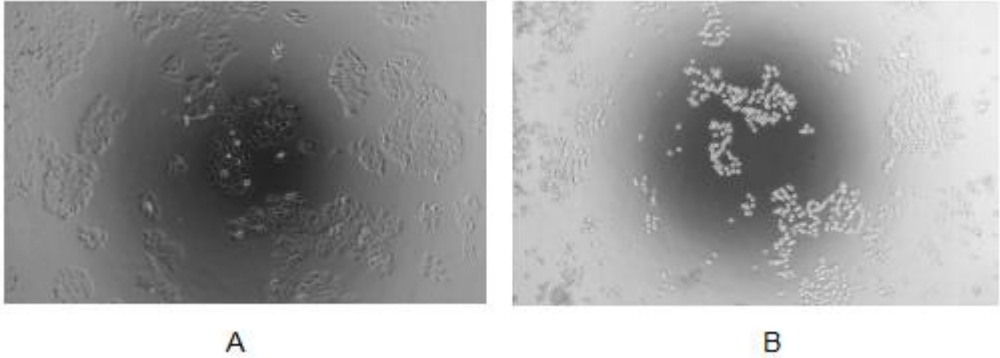


Figure 1. Digestion of HepG2 cells after stimulated with Trypsin
(A) HepG2 cells cultured in DMEM without recombinant pig trypsin.
(B) HepG2 cells digested with 46.9 ug/ml recombinant pig trypsin for 50 minutes.

[IDENTIFICATION]

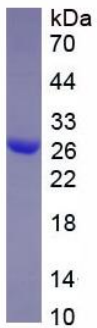


Figure 2. SDS-PAGE

Sample: Active recombinant TRY, Pig

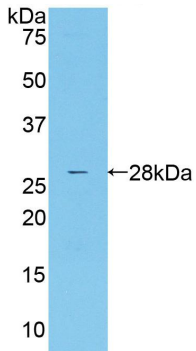


Figure 3. Western Blot**Sample: Recombinant TRY, Pig;****Antibody: Rabbit Anti- Pig TRY Ab (PAA250Po05)****[IMPORTANT NOTE]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.