

Mouse Prolyl endopeptidase / PREP Protein (His Tag)

Catalog Number: 50288-M07B



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

PE; PEP; AI047692; AI450383; D10Wsu136e; PEP; Pop

Protein Construction:

A DNA sequence encoding the mature form of mouse PREP (Q9QUR6) (Leu2-Gln710) was expressed, with a polyhistidine tag at the N-terminus.

Source: Mouse

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The recombinant mouse PREP consists of 727 amino acids and predicts a molecular mass of 82.9 KDa. It migrates as an approximately 79-83 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol, 3mM DTT

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

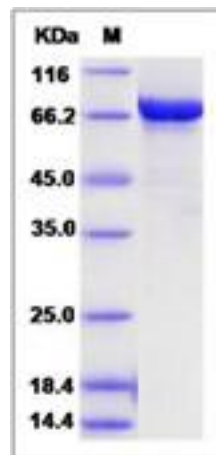
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Prolyl endopeptidase, also known as PREP, belongs to a distinct class of serine peptidases. It is a large cytosolic enzyme which was first described in the cytosol of rabbit brain as an oligopeptidase. Prolyl endopeptidase degrades the nonapeptide bradykinin at the Pro-Phe bond. It is involved in the maturation and degradation of peptide hormones and neuropeptides such as alpha-melanocyte-stimulating hormone, luteinizing hormone-releasing hormone (LH-RH), thyrotropin-releasing hormone, angiotensin, neurotensin, oxytocin, substance P and vasopressin. Prolyl endopeptidase's activity is confined to action on oligopeptides of less than 10 kD and it has an absolute requirement for the trans-configuration of the peptide bond preceding proline. It cleaves peptide bonds at the C-terminal side of proline residues.

References

- 1.Oliveira EB, *et al.* (1976) Isolation of brain endopeptidases: Influence of size and sequence of substrates structurally related to bradykinin. *Biochemistry*. 15(9):1967-74.
- 2.Stepniak D, *et al.* (2006) Highly efficient gluten degradation with a newly identified prolyl endopeptidase: implications for celiac disease. *Am J Physiol Gastrointest Liver Physiol*. 291(4): G621-9.
- 3.Jarho EM, *et al.* (2007) 2(S)-(Cycloalk-1-enecarbonyl)-1-(4-phenylbutanoyl)pyrrolidines and 2(S)-(aroyl)-1-(4-phenylbutanoyl)pyrrolidines as prolyl oligopeptidase inhibitors. *Bioorg Med Chem*. 15(5):2024-31.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>