

Human ENPP5 Protein (His Tag)

Catalog Number: 11519-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

NPP-5; AW061004; D17Abb1e; E-NPP5; mKIAA4152

Protein Construction:

A DNA sequence encoding the human ENPP5 (Q9UJA9) (Met1-Gly429) with a C-terminal polyhistidine tag was expressed.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 96 % 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: Pro 25

Molecular Mass:

The recombinant human ENPP5 is a disulfide-linked homodimer. The reduced monomer comprises 416 amino acids and has a predicted molecular mass of 48.1 kDa. The apparent molecular mass of the protein is approximately 81 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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:

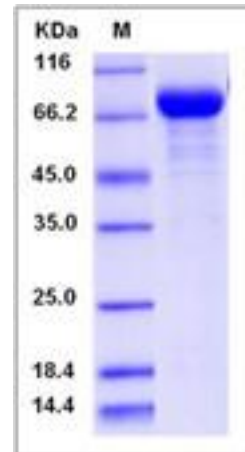
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ENPP5 is a member of the nucleotide pyrophosphatase/phosphodiesterase family (NPP). It is a family comprised by dimeric enzymes that catalyze the hydrolysis of phosphate diester bonds. There are seven isoforms in NPP family, some of which prefer nucleotide substrates, some of which prefer phospholipid substrates, and others of which prefer substrates that have not yet been determined. NPP also belongs to the alkaline phosphatase (AP) superfamily of enzymes and they are located in the cell membrane and hydrolyze extracellular phosphate diesters to affect a wide variety of biological processes. ENPP5 belongs to a group of nucleotide-metabolizing ectoenzymes, which regulate the availability of extracellular nucleotides. ENPP5 may play a role in neuronal cell communication. However, it lacks nucleotide pyrophosphatase and lysophospholipase D activity. It may also be involved in neuronal cell communication. The amino acid sequence of human ENPP5 is 100%, 88%, and 82% identical to that of chimpanzee, dog and mouse/rat. ENPP5 functions in phospholipid metabolism.

References

1. Strausberg RL, *et al.* (2002) Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc Natl Acad Sci.* 99(26):16899-903.
2. Gerhard DS, *et al.* (2004) The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14(10B):2121-7.
3. Lamesch P, *et al.* (2007) hORFeome v3.1: a resource of human open reading frames representing over 10,000 human genes. *Genomics.* 89(3):307-15.

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