

Mouse ENPP7 / NPP-7 Protein (His Tag)

Catalog Number: 50567-M08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

Alk-SMase; Gm254

Protein Construction:

A DNA sequence encoding the mouse ENPP7 (Q3TIW9) (Met 1-Gln 421) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % 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: Ala 22

Molecular Mass:

The secreted recombinant mouse ENPP7 consists of 411 amino acids and has a calculated molecular mass of 47 kDa. It migrates as an approximately 60 kDa band in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile 20mM Tris, 150mM NaCl, pH 7.6

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:

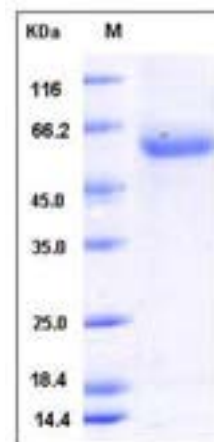
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Ectonucleotide pyrophosphatase / phosphodiesterase family member 7, also known as Alkaline sphingomyelin phosphodiesterase, Intestinal alkaline sphingomyelinase, Alk-Smase, ENPP7 and NPP-7, is a single-pass type I membrane protein which belongs to thenucleotide pyrophosphatase / phosphodiesterase family. ENPP7 / NPP-7 is expressed in the intestines and human bile. ENPP7 / NPP-7 is localized at the surface of the microvillar membrane in small intestine enterocytes, as well as in endosome-like structures and in Golgi complex. The main function of ENPP7 / NPP-7 is to convert the dietary sphingomyelin into ceramide, the sphingolipid messengers via hydrolyzation. ENPP7 / NPP-7 is also reported to exert a phospholipase C activity toward palmitoyl lyso-phosphocholine. The activity of this enzyme is inhibited in a dose dependent manner by ATP, imidazole, orthovanadate and zinc ion. Further, It has been shown in studies that decreased levels of ENPP7 / NPP-7 may be associated with human colon cancer.

References

1.Wu J. et al., 2005, Biochem. J. 386:153-60. 2.Wu J. et al., 2004, Carcinogenesis 25:1327-33. 3.Duan R.-D. et al., 2003, J. Lipid Res. 44:1241-50.

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