Datasheet for ABIN7198103

SMPD1 Protein (His tag)

1 Image

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Overview

Quantity:	50 µg
Target:	SMPD1
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This SMPD1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse SMPD1/ASM Protein (His Tag)(Active)
Sequence:	Met 1-Leu 626
Characteristics:	A DNA sequence encoding the mouse SMPD1 (Q04519) (Met 1-Leu 626) was expressed,with a C-terminal polyhistidine tag.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave 2-N-Hexadecanoylamino-4-nitrophenylphosphorylcholine(HNPPC).The specific activity is > 1,500 pmoles/min/µg.

Target Details

Target:	SMPD1

Target Details

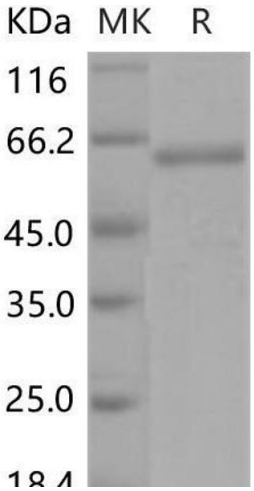
Alternative Name:	SMPD1/ASM (SMPD1 Products)
Background:	Background: Sphingomyelin phosphodiesterase 1 (SMPD1) , also known as ASM (acid sphingomyelinase), is a member of the acid sphingomyelinase family of enzymes. Three isoforms have been identified, isoform 1 is 631 amino acids (aa) in length as the pro form, while Isoform 2 and isoform 3 have lost catalytic activity. The active SMPD1 isoform 1 contains one saposin B-type domain that likely interacts with sphingomyelin, and a catalytic region. Human SMPD1 is 86 % aa identical to mouse SMPD1. SMPD1 is a monomeric lysosomal enzyme that converts sphingomyelin (a plasma membrane lipid) into ceramide through the removal of phosphorylcholine. This generates second messenger components that participate in signal transduction. Defects in SMPD1 are the cause of Niemann-Pick disease type A (NPA) and type B (NPB), also known as Niemann-Pick disease classical infantile form and Niemann-Pick disease visceral form. Niemann-Pick disease is a clinically and genetically heterogeneous recessive disorder. NPB has little if any neurologic involvement and patients may survive into adulthood. Synonym: A-SMase,ASM,aSMase,Zn-SMase
Molecular Weight:	66.3 kDa
UniProt:	Q04519

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 8.0, 0.1 % Tween20
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.



Western Blotting

Image 1.