Catalog Number: PKSM040611



Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description			
Synonyms	Alk-SMase;Gm254		
Species	Mouse		
Expression Host	HEK293 Cells		
Sequence	Met 1-Gln 421		
Accession	Q3TIW9		
Calculated Molecular Weight	47.0 kDa		
Observed molecular weight	60 kDa		
Tag	C-His		
Properties			
Purity	> 90 % as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.		
Storage	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.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
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. Please refer to the specific buffer information in the printed manual.		
Reconstitution	Please refer to the printed manual for detailed information.		

KDa	MK	R	
116	-		
66.2			
45.0	-		
35.0	-		
25.0	-		
18.4 14.4	1		

> 90 % as determined by reducing SDS-PAGE.

Background

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

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studies that decreased levels of ENPP7 / NPP-7 may be associated with human colon cancer.

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