

Recombinant Protein Technical Manual Recombinant Human ENPP7/NPP-7 Protein (His Tag) RPES0270

## **Product Data:**

Product SKU: RPES0270

Species: Human

**Size:** 10µg

Expression host: HEK293 Cells

**Uniprot:** NP\_848638.2

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FIU	LEIII	Infor		UII.

Molecular Mass:	49 kDa	
AP Molecular Mass:	55-60 kDa	
Tag:	C-His	
Bio-activity:		
Purity:	> 95 % as determined by reducing SDS-PAGE.	
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.	
Storage:	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 PBS, pH 7.4	
Reconstitution:	Please refer to the printed manual for detailed information.	
Application:		
Synonyms:	ALK-SMase;E-NPP7;NPP-7;NPP7	

## Sequence: Met 1-Ser 439

## 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 the nucleotide 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.