

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ENPP-7/Alk-SMase in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant mouse ENPP-7 is observed, and less than 5% cross-reactivity with recombinant human (rh) ENPP-2 and rhENPP-5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ENPP-7/Alk-SMase Ala22-Ser439 Accession # Q6UWV6
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human ENPP-7/Alk-SMase (Catalog # 4924-EN)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human ENPP-7/Alk-SMase (Catalog # 4924-EN), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

ENPP-7 (ectonucleotide pyrophosphatase/phosphodiesterase 7), also known as alkaline sphingomyelinase (alk-SMase) is expressed in the intestines and in human bile (1). It shares 30%-36% homology with the members of the nucleotide pyrophosphatase/phosphodiesterase (NPP) family while sharing no similarities with neutral or acid SMase (2). Its main function is the digestion of dietary sphingomyelin by hydrolyzing sphingomyelin into ceramide and phosphorylcholine. ENPP-7 is reported to hydrolyse and inactivate platelet-activating factor (PAF) by a phospholipase C-type activity (3). Studies also show a decrease in ENPP-7 activity in human colorectal adenocarcinomas and human colorectal carcinomas, which indicate a potential role of ENPP-7 in human colon cancer (4, 5).

References:

1. Duan, R-D. *et al.* (2006) *Biochim. Biophys.* **1761**:281.
2. Duan, R-D. *et al.* (2003) *J. Biol. Chem.* **278**:38528.
3. Wu, J. *et al.* (2006) *Biochem J.* **394**:299.
4. Hertervig, E. *et al.* (1996) *Cancer.* **79**:448.
5. Hertervig, E. *et al.* (1999) *Br. J. Cancer.* **81**:232.