

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse ENPP-7/Alk-SMase in Western blots. In Western blots, approximately 50% cross-reactivity with recombinant human ENPP-7 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse ENPP-7/Alk-SMase Ala22-Gln421 Accession # NP_001025462
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse ENPP-7/Alk-SMase (Catalog # 5160-EN)

## PREPARATION AND STORAGE

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

## BACKGROUND

ENPP7 (ectonucleotide pyrophosphatase/phosphodiesterase 7), also known as alkaline sphingomyelinase (Alk-SMase) is expressed in the intestines and in 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. ENPP7 is reported to hydrolyse and inactivate platelet-activating factor (PAF) by a phospholipase C-type activity (3). Studies show a decrease in ENPP7 activity in human colorectal adenocarcinomas and human colorectal carcinomas, which indicate a potential role of ENPP7 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.