

## DESCRIPTION

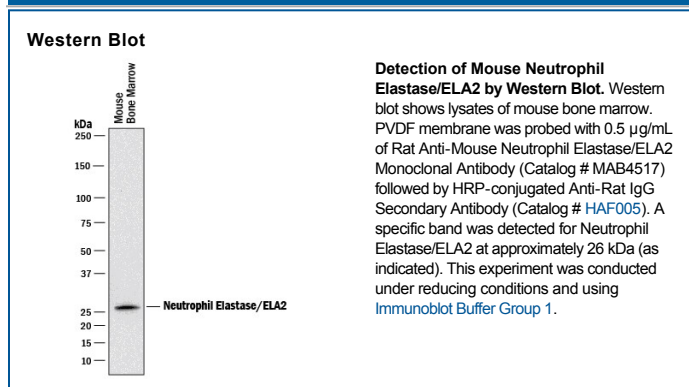
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Neutrophil Elastase/ELA2 in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 887105
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Neutrophil Elastase/ELA2 Met1-Arg260 Accession # Q3UP87
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
<b>Western Blot</b>	0.5 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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

Neutrophil Elastase (ELA2), also known as Leukocyte Elastase, Bone marrow serine protease, Medullasin and ELANE, is a 25-30 kDa serine protease belonging to the peptidase S1 family. ELA2 is secreted by neutrophils during inflammation, it destroys bacteria and host tissue. ELA2 function is the degradation of many extracellular matrix macromolecules. ELA2 is localized to keratohyalin granules, where it was found to directly participate in pro-filaggrin processing. When expressed aberrantly, ELA2 can cause emphysema or emphysematous changes, it involves breakdown of the lung structure and increased airspaces. Alpha-1 Antitrypsin (Serpin A1) and secretory leukocyte protease inhibitor (SLPI) have been shown to inhibit ELA2 activity.