

### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Proteinase 3/Myeloblastin/PRTN3 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 684022
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Proteinase 3/Myeloblastin/PRTN3 Ala26-Arg249 Accession # P24158
<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 either lyophilized or as a 0.2 µm filtered solution in PBS.

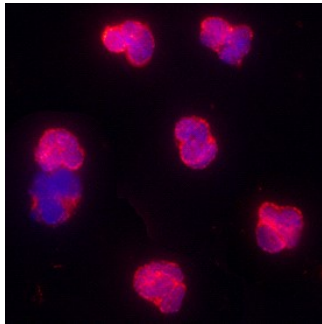
### APPLICATIONS

**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
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

### DATA

#### Immunocytochemistry



**Proteinase 3/Myeloblastin/PRTN3 in Human Granulocytes.** Proteinase 3/Myeloblastin/PRTN3 was detected in immersion fixed human granulocytes using Mouse Anti-Human Proteinase 3/Myeloblastin/PRTN3 Monoclonal Antibody (Catalog # MAB61341) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and plasma membranes. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<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

Leukocyte proteinase 3 (PRTN3 or PR3), also called Myeloblastin (MBN) or NP-4, is a 32-33 kDa member of the peptidase S1 family of enzymes. It is expressed by monocytes and neutrophils, the latter of which either secretes it, sequesters it in azurophilic granules, or expresses it on the cell surface. When secreted, it acts on HK and activates the kinin pathway. In azurophilic granules, it aids in the digestion of phagocytosed material. On the cell surface, it likely acts on ECM. Human MBN precursor is 231 amino acids (aa) in length. It contains an Ala26Glu27 propeptide that is removed during maturation, a 221 aa mature enzyme (aa 28-248), and an eight aa C-terminal propeptide (aa 249-256). Within the cell, a 35 kDa immature form exists; on the cell surface, both constitutively inactive, and induced active forms may be found, often in a noncovalent association with CD177/NB1. Over aa 26-249, human MBN shares 68% aa sequence identity with mouse MBN.