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Datasheet for 600-401-GW9

Ngp Antibody

Overview

Description:	Anti-NGP (Neutrophilic granule protein) (RABBIT) Antibody - 600-401-GW9
Item No.:	600-401-GW9
Size:	100 µg
Applications:	IF, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI). A proteomic study in 2011 determined a direct correlation between NGP mRNA levels and myeloid-derived suppressor cells. Specifically cathepsin B, a catalytic mechanism and potentially biomarker in a variety of cancers and amyloid plaque development, was inhibited by NGP. The significance of NGP as a negative regulator of tumor metastasis makes this antibody ideal for investigators involved in cancer research, as well as Alzheimer's research.
Synonyms:	rabbit anti-NGP antibody, Neutrophilic granule protein, Cystatin-like protein, Myeloid bactenecin protein, Myeloid secondary granule protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Ngp
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	Affinity purified Anti-NGP antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein of mouse NGP protein.

Purity/Specificity:	Anti-NGP is directed against full-length mouse NGP. This product is an affinity purified antibody produced by immunoaffinity chromatography using recombinant protein coupled to agarose beads. A BLAST analysis was used to suggest reactivity with this protein in NGP based on 100% homology match for the immunogen sequence.
Relevant Links:	• NCBI - NP_032720.2 • GeneID - 18054 • UniProtKB - O08692

Application Details

Tested Applications:	IF, WB
Application Note:	This affinity purified antibody has been tested for use in IF, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band 39-42 kDa for non reduced and 20-27 kDa for reduced gels corresponding to NGP by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1:200
WB:	1:1000

Formulation

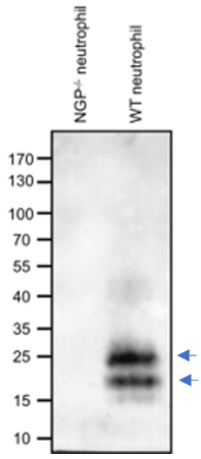
Physical State:	Liquid (sterile filtered)
Concentration:	1.10 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

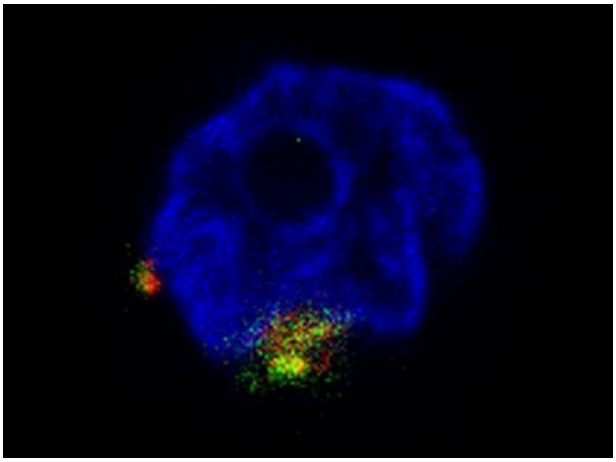
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

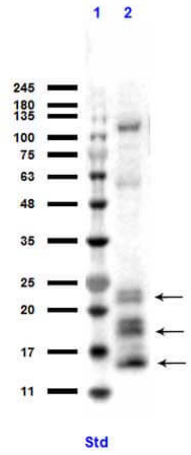
Images



Western Blot
Western Blot Results of Rabbit Anti-NGP Antibody.
Lane 1: Mouse peritoneal neutrophils from NGP deficient mice.
Lane 2: Mouse peritoneal neutrophils from wild type.
Load: 5µg total lysate.
Primary Antibody: Anti-NGP at 1:1000 at RT for 2hrs.
Secondary Antibody: rabbit HRP secondary at 1:20,000 at RT for 1hr.
Blocking: 5% non-fat dry milk for 30 mins at RT.
Predicted/Observed size: 17, 20 kDa for NGP. Glycosylation shows shifting of MW.
Results: detects endogenous NGP expressed in mouse neutrophils.



Immunofluorescence Microscopy
Immunofluorescence of Rabbit Anti-NGP Antibody.
Tissue: myc-tagged NGP over expressed THP-1.
Fixation: 4% PFA.
Primary Antibody: Anti-NGP at 1:200 at RT for 2hrs.
Secondary Antibody: rabbit secondary at 1:1000 at RT for 2mins.
Staining: NGP is stained red, myc-tag is stained green, and the nucleus is counterstained blue with DAPI.
Localization: NGP (red) and myc-tag (green) were colocalized at perinuclear region.



Western Blot
Western Blot of Rabbit anti-Ngp antibody.
Lane 1: MW ladder opal pre-stained (p/n MB-210-0500).
Lane 2: 32D lysate.
Load: 10 µg per lane.
Primary antibody: Ngp antibody at 1:1000 for overnight at 4°C.
Secondary antibody: rabbit secondary HRP antibody (p/n 611-103-122) at 1:70,000 for 45 min at RT.
Block: BlockOut (p/n MB-073) overnight at 4°C.
Predicted/Observed size: 17, 20 kDa for Ngp. Higher banding due to glycosylation. ~125 kDa non-specific.

References

- Cao X et al. Oral Immunotherapy Reshapes Intestinal Immunosuppression via Metabolic Reprogramming to Enhance Systemic Anti-Tumor Immunity. *Adv Sci (Weinh).* (2023)
- Hong J et al. Neutrophilic granule protein is a novel murine LPS antagonist. *Immune Netw.* (2019)

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