

# Product Datasheet

## Rhot1 Antibody - BSA Free

### NBP1-59021

Unit Size: 100 ul

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-59021**

Rhot1 Antibody - BSA Free

Product Information	
Unit Size	100 ul
Concentration	0.5 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Affinity purified
Buffer	PBS, 2% Sucrose
Target Molecular Weight	71 kDa

Product Description	
Description	The addition of 50% glycerol is optional for those storing this antibody at -20C and not aliquoting smaller units. However, please note that glycerol may interrupt some downstream antibody applications and should be added with caution.
Host	Rabbit
Gene ID	55288
Gene Symbol	RHOT1
Species	Human, Mouse, Rat
Reactivity Notes	Rat reactivity reported in scientific literature (PMID: 26558789).
Immunogen	Synthetic peptides corresponding to RHOT1(ras homolog gene family, member T1) The peptide sequence was selected from the N terminal of RHOT1 (NP_060777). Peptide sequence MKKDVRILLVGEPRVGKTSLIMSLVSEEFPEEVPPRAEEITIPADVTPER. The peptide sequence for this immunogen was taken from within the described region.

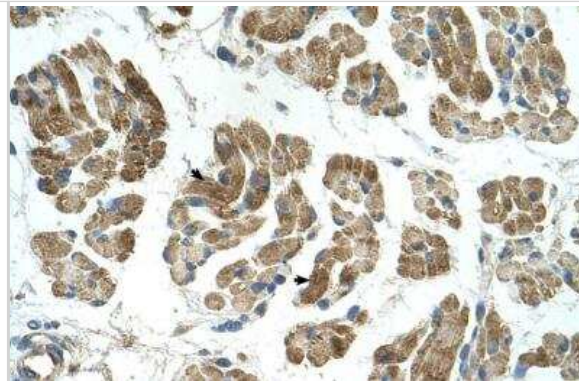
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 1.0 ug/ml, Immunohistochemistry 1:10-1:500, Immunoprecipitation, Immunohistochemistry-Paraffin 4-8 ug/ml

**Images**

Western Blot: Rhot1 Antibody [NBP1-59021] - Fetal Lung lysates, Antibody Dilution: 1.0 ug/ml.



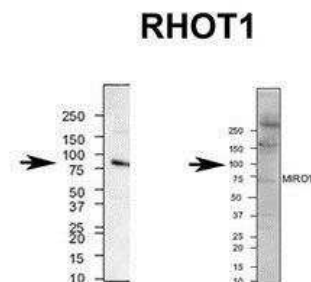
Immunohistochemistry-Paraffin: Rhot1 Antibody [NBP1-59021] - Human Muscle Tissue, Skeletal muscle cells (Indicated with Arrows) 4-8ug/ml.



Western Blot: Rhot1 Antibody [NBP1-59021] - HepG2 cell lysate, concentration 1.0ug/ml.

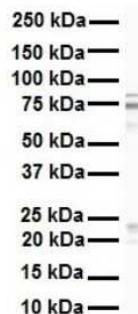


Western Blot: Rhot1 Antibody [NBP1-59021] - RHOT1 Antibody Titration: 2 ug/ml Positive Control: mouse brain/ human neuroblastoma cell line

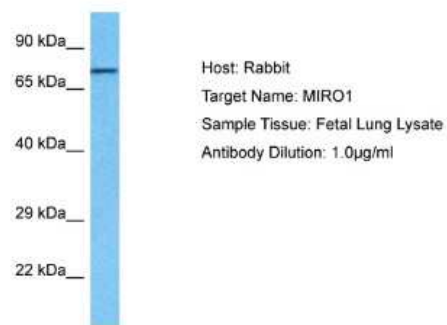


See Immunoblot 2 Data and Customer Feedback tab for more information.

Western Blot: Rhot1 Antibody [NBP1-59021] - Antibody Titration: 1 ug/ml Human A549.



Western Blot: Rhot1 Antibody [NBP1-59021] - Fetal Lung lysates,  
Antibody Dilution: 1.0 ug/ml.



## Publications

Shembekar S, Nikolaus P, Honnert U et al. Regulation of mitochondrial cristae organization by Myo19, Miro1 and Miro2, and metaxin 3. *Journal of cell science* 2025-03-06 [PMID: 39882711]

Liu D, Webber H, Bian F et al. Optineurin-facilitated axonal mitochondria delivery promotes neuroprotection and axon regeneration *Nature communications* 2025-02-20 [PMID: 39979261]

Cangkrama M, Liu H, Wu X et al. MIRO2-mediated mitochondrial transfer from cancer cells induces cancer-associated fibroblast differentiation. *Nature cancer* 2025-08-28 [PMID: 40877413]

Lee IW, Adhikari D, Carroll J. Miro1 depletion disrupts spatial distribution of mitochondria and leads to oocyte maturation defects *Frontiers in Cell and Developmental Biology* 2022-10-17 [PMID: 36325364]

Cangkrama M, Liu H, Whipman J et al. A pro-tumorigenic mDia2-MIRO1 axis controls mitochondrial positioning and function in cancer-associated fibroblasts *Cancer research* 2022-08-23 [PMID: 35997559] (WB, PLA)

Details:

WB Dilutions: 1:500

Majstrowicz K, Honnert U, Nikolaus P et al. Coordination of mitochondrial and cellular dynamics by the actin-based motor Myo19 *Journal of cell science* 2021-05-15 [PMID: 34013964] (WB, Human)

Oeding S J, Majstrowicz K et al. Identification of Miro1 and Miro2 as mitochondrial receptors for myosin XIX. *J Cell Sci* 2018-10-09 [PMID: 30111583] (WB, Human)

Jackson JG, Robinson MB. Reciprocal Regulation of Mitochondrial Dynamics and Calcium Signaling in Astrocyte Processes. *J. Neurosci.* 2015-11-11 [PMID: 26558789] (WB, Rat)

Aguilera MA, Korac J, Durcan TM et al. The E3 Ubiquitin ligase parkin is recruited to the 26S proteasome via the proteasomal ubiquitin receptor Rpn13 *J. Biol. Chem.* 2015-02-09 [PMID: 25666615] (WB, Human)

Brandenberger, R. *Nat. Biotechnol.* 22 (6), 707-716. 2004-01-01 [PMID: 15146197]



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### **Products Related to NBP1-59021**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP2-52964PEP	Rhot1 Recombinant Protein Antigen

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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