Product Datasheet

TRAP1 Antibody (TRAP1-6)
NB300-555

Unit Size: 100ug

Store at -20C. Avoid freeze-thaw cycles.

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Publications: 5

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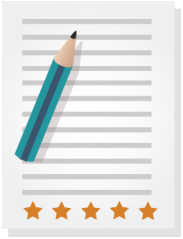
Updated 9/9/2025 v.20.1



NB300-555

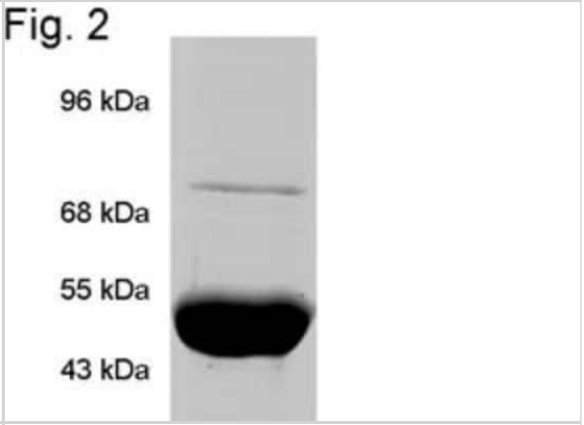
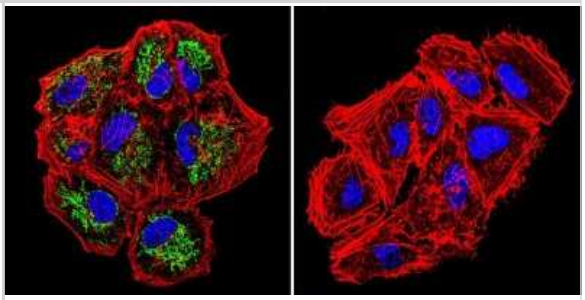
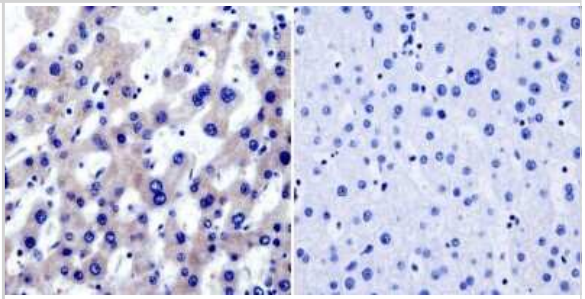
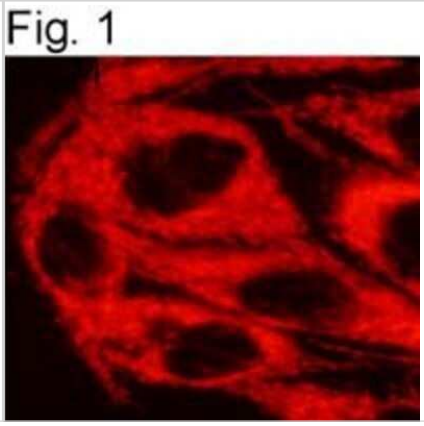
TRAP1 Antibody (TRAP1-6)

Product Information	
Unit Size	100ug
Concentration	1 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	TRAP1-6
Preservative	0.05% Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	PBS with 1 mg/ml BSA

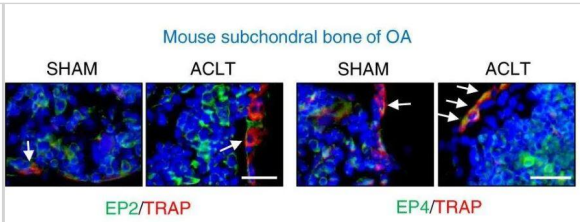
Product Description	
Description	Novus Biologicals Mouse TRAP1 Antibody (TRAP1-6) (NB300-555) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and IP. Anti-TRAP1 Antibody: Cited in 4 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	10131
Gene Symbol	TRAP1
Species	Human, Mouse
Reactivity Notes	Mouse reported in literature (PMID: 21924824). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Specificity/Sensitivity	Detects tumor necrosis factor receptor-associated protein (TRAP1) from human tissues.
Immunogen	Purified recombinant TRAP1.

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation
Recommended Dilutions	Western Blot 1:2000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence 1:250, Immunoprecipitation 1:10 - 1:500, Immunohistochemistry-Paraffin 1:10 - 1:100, Immunohistochemistry-Frozen 1:20
Application Notes	WB: Detects an approx. 75 kDa protein representing TRAP1.

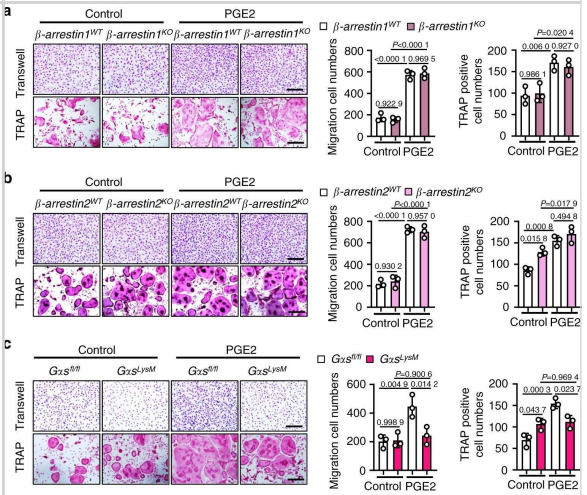
Images

Western Blot: TRAP1 Antibody (TRAP1-6) [NB300-555] - Figure 2 illustrates IP of TRAP1 visualized by Coomassie Blue staining.	
Immunocytochemistry/Immunofluorescence: TRAP1 Antibody (TRAP1-6) [NB300-555] - Analysis of TRAP1 in NCI-H460 Cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a TRAP1 monoclonal antibody at a dilution of 1:200 overnight at 4C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. TRAP1 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown.	
Immunohistochemistry-Paraffin: TRAP1 Antibody (TRAP1-6) [NB300-555] - Normal biopsies of deparaffinized Human liver tissue, dilution of 1:20.	
Immunocytochemistry/Immunofluorescence: TRAP1 Antibody (TRAP1-6) [NB300-555] - Immunolocalization of TRAP1 in PC-3-M cells.	

Immunohistochemistry: TRAP1 Antibody (TRAP1-6) [NB300-555] - Representative images of IHF staining of EP2 or EP4 (green) and TRAP1 (NB300-555) (red) in subchondral bone 2 weeks post-sham or ACLT surgery (left) and quantitative analysis (right). The white arrows indicate TRAP-positive osteoclasts expressing EP2 or EP4. Scale bars, 20 um. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/35260562/) licensed under a CC-BY license.



Immunocytochemistry/ Immunofluorescence: TRAP1 Antibody (TRAP1-6) [NB300-555] - PGE2 regulates migration & osteoclast differentiation through the Gαs/PI3K/AKT/MAPK signaling pathways downstream of EP4. PGE2 regulates migration & osteoclast differentiation independent of β-arrestin1 (a) & β-arrestin2 (b) but via Gαs (c). BMMs from the WT & littermate β-arrestin1- & β-arrestin2-knockout mice were used to generate osteoclasts by stimulation with 10 ng·mL−1 M-CSF & 50 ng·mL−1 RANKL & incubation with 100 nmol·L−1 PGE2. For Gαs experiments, osteoclasts were generated from the GMMs of the Gαsfl/fl controls & Gαsfl/fl; LysM-cre (GαsLysM) mice. A differentiation assay (TRAP staining) (left) & the corresponding quantitative analysis (right). Scale bars, 50 μm. Error bars are the mean ± s.d. n = 3. Two-way ANOVA followed by Tukey's t tests. Scale bars, 50 μm. d cAMP production was measured via ELISAs for osteoclasts derived from the Ep4fl/fl & Ep4LysM mice. BMMs from the two mouse strains were isolated & stimulated with 10 ng·mL−1 M-CSF & 50 ng·mL−1 RANKL to differentiate into osteoclasts & incubated with 100 nmol·L−1 PGE2 for 30 min prior to cAMP measurements. Error bars are the mean ± s.d. ***P < 0.001 by unpaired two-tailed Student's t test. The experiment was performed with three biological replicates. e Representative images of the indicated protein expression by western blotting for osteoclasts generated using BMMs of Ep4fl/fl & Ep4LysM mice. The cells were treated either with osteoclastogenic media (10 ng·mL−1 M-CSF & 50 ng·mL−1 RANKL) alone, with PGE2 (100 nmol·L−1), or PGE2 with IBMX (1 mmol·L−1) for 3 h. The experiments were performed with three biological replicates Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/35260562), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

He L, Zhang Q, You Y et al. Exogenous activation of the adhesion GPCR ADGRD1/GPR133 protects against bone loss by negatively regulating osteoclastogenesis. Science Advances 2025-07-11 [PMID: 40644539]

Jiang W, Jin y, Zhang S et al. PGE2 activates EP4 in subchondral bone osteoclasts to regulate osteoarthritis Bone research 2022-03-09 [PMID: 35260562] (IHC-P, Mouse)

Wang TS, Coppens I, Saorin A et al. Endolysosomal Targeting of Mitochondria Is Integral to BAX-Mediated Mitochondrial Permeabilization during Apoptosis Signaling Dev. Cell 2020-06-22 [PMID: 32504557]

Hamacher-Brady A, Brady NR et al. Bax/Bak-Dependent, Drp1-Independent Targeting of XIAP into Inner-Mitochondrial Compartments Counteracts Smac-Dependent Effector Caspase Activation J. Biol. Chem. 2015-07-01 [PMID: 26134559] (ICC/IF, Human)

Hamacher-Brady A, Choe S C, Krijnse-Locker J, Brady N R. Intramitochondrial recruitment of endolysosomes mediates Smac degradation and constitutes a novel intrinsic apoptosis antagonizing function of XIAP E3 ligase. Cell Death Differ. 2014-12-01 [PMID: 25080938]

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Products Related to NB300-555

NBL1-17255	TRAP1 Overexpression Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

Limitations

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