

Product Datasheet

RANK/TNFRSF11A Antibody (9A725) - BSA Free NB100-56508

Unit Size: 0.1 mg

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

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NB100-56508

RANK/TNFRSF11A Antibody (9A725) - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	9A725
Preservative	0.02% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Product Description	
Host	Mouse
Gene ID	8792
Gene Symbol	TNFRSF11A
Species	Human, Mouse, Rat, Avian
Reactivity Notes	Rat reactivity reported in scientific literature (PMID: 24376119). Avian reactivity reported in scientific literature (PMID: 31214852).
Immunogen	A fusion protein containing amino acid residues 326-616 of human RANK was used as immunogen. This antibody recognizes an epitope located between amino acid residues 330-427 of human RANK (NP_003830).
Product Application Details	
Applications	Western Blot, Flow Cytometry, Flow (Cell Surface), Immunohistochemistry, Immunohistochemistry-Paraffin, CyTOF-ready
Recommended Dilutions	Western Blot 1-2 ug/ml, Flow Cytometry 2-4 ug/ml, Immunohistochemistry 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500, Flow (Cell Surface) reported in scientific literature (PMID 24376119), CyTOF-ready
Application Notes	Bharti et al (2004) published the RANK antibody clone 9A725 for Flow (Cell Surface). However, the epitope range recognized by this antibody is a potential cytoplasmic region as defined by www.uniprot.org. Hence, researchers are encouraged to refer to both the publication and the bioinformatics data bases for additional information in order to make their own determination regarding the suitability of the antibody for cell surface flow cytometry. In RAW cells, a 97 kDa is observed. This antibody is CyTOF ready.

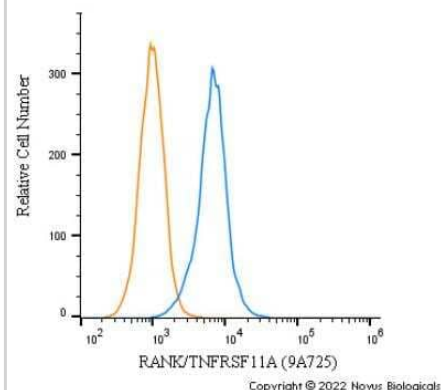


Images

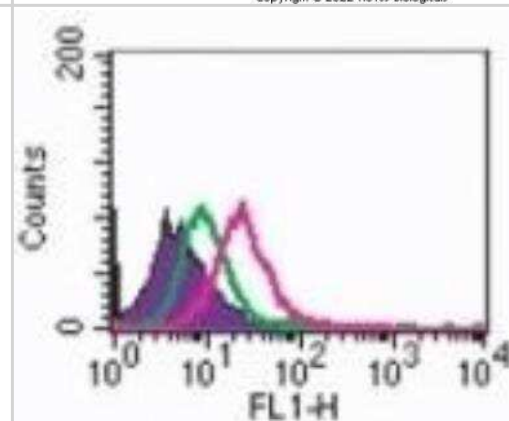
Western Blot: RANK/TNFRSF11A Antibody (9A725) [NB100-56508] - Analysis of RANK in transfected 293 cells using RANK antibody at 2 ug/ml.



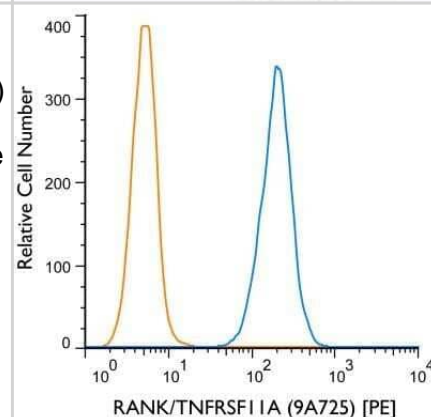
Flow Cytometry: RANK/TNFRSF11A Antibody (9A725) - BSA Free [NB100-56508] - An intracellular stain was performed on Raw264.7 cells with RANK/TNFRSF11A Antibody (9A725) NB100-56508 (blue) and a matched isotype control MAB002 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (84540, Thermo Fisher).



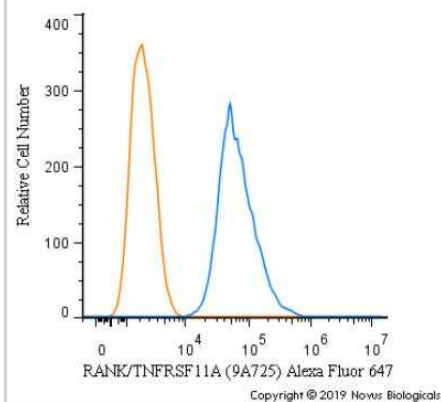
Flow Cytometry: RANK/TNFRSF11A Antibody (9A725) [NB100-56508] - Intracellular flow cytometry analysis of RANK in 10⁶ RAW cells using 2 ug of RANK antibody. Shaded histogram represents RAW cells without antibody; green represents isotype control; antibody red represents RANK antibody.



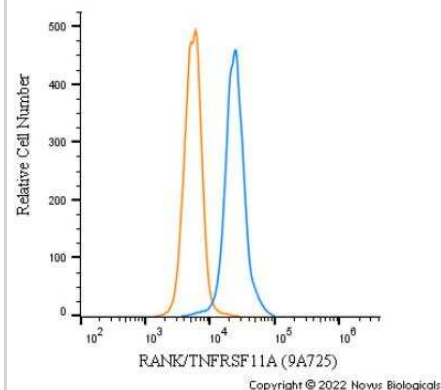
Flow Cytometry: RANK/TNFRSF11A Antibody (9A725) [NB100-56508] - Using the PE direct conjugate An intracellular stain was performed on K-562 cells with RANK/TNFRSF11A (9A725) antibody NB100-56029 (blue) and a matched isotype control NBP1-97005PE (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Phycoerythrin.



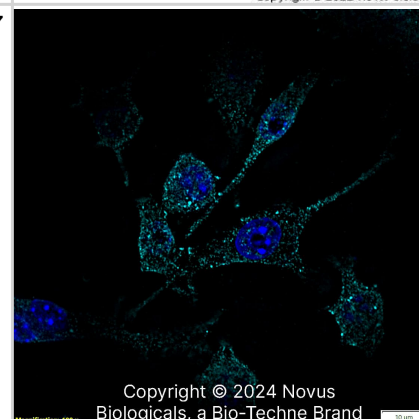
Flow Cytometry: RANK/TNFRSF11A Antibody (9A725) [NB100-56508] - An intracellular stain was performed on Raw264.7 cells with RANK/TNFRSF11A [9A725] Antibody NB100-56508AF647 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 647.



Flow Cytometry: RANK/TNFRSF11A Antibody (9A725) - BSA Free [NB100-56508] - An intracellular stain was performed on MG-63 cells with RANK/TNFRSF11A Antibody (9A725) NB100-56508 (blue) and a matched isotype control MAB002 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (84540, Thermo Fisher).



RANK/TNFRSF11A (9A725) was detected in immersion fixed Raw 264.7 mouse macrophage cell line using Mouse anti-RANK/TNFRSF11A (9A725) Protein-G purified Monoclonal Antibody conjugated to Alexa Fluor® 647 (Catalog # NB100-56508AF647) (light blue) at 10 µg/mL overnight at 4C. Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.



Publications

W Ji, Y Lu, Z Ma, K Gan, Y Liu, Y Cheng, J Xu, S Liu, Y Guo, S Han, Z Zhao, H Xu, W Qi Triptolide attenuates inhibition of ankylosing spondylitis-derived mesenchymal stem cells on the osteoclastogenesis through modulating exosomal transfer of circ-0110634 Journal of Orthopaedic Translation, 2022-09-16;36(0):132-144. 2022-09-16 [PMID: 36185580]

Dorchin-Ashkenazi H, Ginat-Koton R, Gabet Y et al. The Balance between Orthodontic Force and Radiation in the Jawbone: Microstructural, Histological, and Molecular Study in a Rat Model Biology (Basel) 2021-11-18 [PMID: 34827196] (IHC-P, Rat)

Details:

Citation using the HRP format of this antibody.

Ferguson J, Wilcock DJ, McEntegart S et al. Osteoblasts contribute to a protective niche that supports melanoma cell proliferation and survival Pigment Cell Melanoma Res 2019-07-19 [PMID: 31323160] (WB, Human)

Hiyama S, Yokoi M, Akagi Y et al. Osteoclastogenesis from bone marrow cells during estrogen-induced medullary bone formation in Japanese quails J. Mol. Histol. 2019-08-01 [PMID: 31214852] (Avian)

Details:
Quail

Nanke Y, Kobashigawa T, Yago T et al. RANK Expression and Osteoclastogenesis in Human Monocytes in Peripheral Blood from Rheumatoid Arthritis Patients. BioMed Research International 2016-09-01 [PMID: 27822475] (FLOW, Human)

Huynh N, VonMoss L, Smith D et al. Characterization of Regulatory Extracellular Vesicles from Osteoclasts. J Dent Res 2016-06-01 [PMID: 26908631]

Lafferty MK, Fantry L, Bryant J et al. Elevated suppressor of cytokine signaling-1 (SOCS-1): a mechanism for dysregulated osteoclastogenesis in HIV transgenic rats Pathog Dis 2013-12-09 [PMID: 24376119] (Flow-CS, Rat)

Details:
This citation used the PE version of this antibody.

Watari K, Shibata T, Nabeshima H et al. Impaired differentiation of macrophage lineage cells attenuates bone remodeling and inflammatory angiogenesis in Ndr1 deficient mice. Sci Rep. 2016-01-18 [PMID: 26778110] (WB, Mouse)

Details:
RANK antibody used for WB on BM-derived macrophages (BMDMs) from WT and KO mice at a dilution of 1:1000 (Figure 3h).

Kaneko YS, Ota A, Nakashima A et al. Lipopolysaccharide treatment arrests the cell cycle of BV-2 microglial cells in G1 phase and protects them from UV light-induced apoptosis. J Neural Transm. 2014-06-12 [PMID: 24919883] (WB, Mouse)

Details:
Fig 3: BV-2 immortalized mouse microglial cell line. Procaspase and active/cleaved caspase were observed at 32 kDa and 17 kDa respectively.

Ayon Haro ER, Ukai T, Yokoyama M et al. Locally administered interferon-gamma accelerates lipopolysaccharide-induced osteoclastogenesis independent of immunohistological RANKL upregulation. J Periodontal Res. 2011-06-01 [PMID: 21361961]

Details:
RANK-PE, clone 9A725 (IMG-128D). Flow (cell surface): Primary mouse bone marrow macrophages. By flow cytometry analysis, ~95% of the bone marrow macrophage population was positive for RANK and CD11b (data described on page 363). Note: The RANK-PE mAb was used to help characterize the primary bone macrophages isolated from mouse tibiae and femurs (see Material and Methods, page 363).

Das S, Sepahi I, Duthie A et al. RANK receptor oligomerisation in the regulation of NFkB signalling. J. Mol. Endocrinol. 2014-05-23 [PMID: 24859969] (WB, Mouse)

Details:
HeLa cells transfected with mouse WT-RANKmyc, W434X-RANKmyc or G280X-RANKmyc constructs, Fig 3Bi. The specificity of RANK mAb was validated by WB with recombinant expressed mouse WT-RANKmyc (80 kDa) and W434X-RANKmyc (55 kDa). The RANK mAb did not detect

Crockett JC, Mellis DJ, Shennan KI et al. Signal peptide mutations in RANK prevent downstream activation of NF-kB. J Bone Miner Res. 2011-08-01 [PMID: 21472776] (WB)

Details:
RANK/TNF11aR/ODFR (IMG-128A). WB: 293 cells transfected with RANK, Fig 1. Note: The specificity of the RANK antibody (IMG-128A) was transfected validated by WB in Rank transfected 293 cell line, Fig 1.

More publications at <http://www.novusbio.com/NB100-56508>



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NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NB100-56029	RANK/TNFRSF11A Antibody (9A725) [PE]

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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