

# Product Datasheet

## TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide and BSA Free NB100-56593

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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**NB100-56593**

TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide and BSA Free

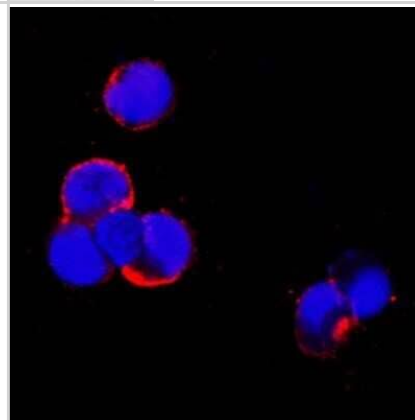
<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	12A668
<b>Preservative</b>	No Preservative
<b>Isotype</b>	IgG1 Kappa
<b>Purity</b>	Protein G purified
<b>Buffer</b>	Sterile - filtered PBS
<b>Target Molecular Weight</b>	35 kDa
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Mouse TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide and BSA Free (NB100-56512) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and CHIP. Anti-TRANCE/TNFSF11/RANK L Antibody: Cited in 11 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	8600
<b>Gene Symbol</b>	TNFSF11
<b>Species</b>	Human, Mouse, Rat
<b>Immunogen</b>	A bacterially expressed fusion protein containing amino acid residues 1-317 of mouse TRANCE was used as immunogen (NP_003692).
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Chromatin Immunoprecipitation, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Chromatin Immunoprecipitation (ChIP), CyTOF-ready
<b>Recommended Dilutions</b>	Western Blot 1-2 ug/ml, Chromatin Immunoprecipitation 1:10-1:500. Use reported in scientific literature (PMID 25859979), Flow Cytometry, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1 - 5 ug/ml, Chromatin Immunoprecipitation (ChIP) 1:10-1:500, CyTOF-ready
<b>Application Notes</b>	Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

## Images

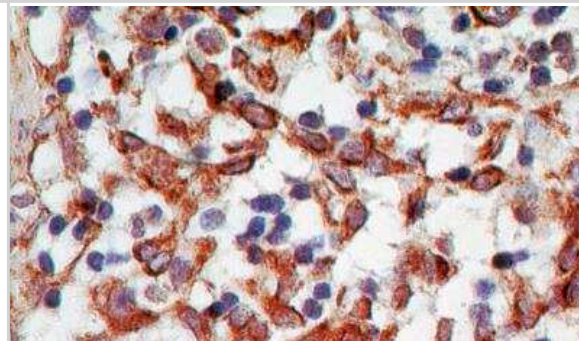
Western Blot: TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide Free [NB100-56593] - Analysis of human lymph node lysate (35ug per lane, RIPA buffer) at 0.5ug/ml. Band detected at ~35kDa and ~28kDa. (Expected MW of 35.5kDa according to NP\_003692.1 and of 27.7kDa according to NP\_143026.1)



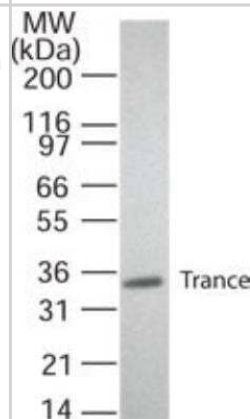
Immunocytochemistry/Immunofluorescence: TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide Free [NB100-56593] - TRANCE was detected in immersion fixed mouse splenocytes using anti-human/mouse/rat mouse monoclonal antibody (Catalog # NB100-56512) for 1 hour at room temperature. Cells were stained using NL557 (red) fluorescent anti-mouse secondary antibodies (Catalog # NL007) and counterstained with DAPI (blue). Image using the standard format of this product.



Immunohistochemistry-Paraffin: TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide Free [NB100-56593] - Formalin-fixed, paraffin-embedded human lymph node probed with Trance antibody at 5 ug/ml. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.



Western Blot: TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide Free [NB100-56593] - Analysis of transfected cell lysate was probed with 2 ug of Trance antibody.



Immunohistochemistry-Paraffin: TRANCE/TNFSF11/RANK L Antibody (12A668) - Azide Free [NB100-56593] - Formalin-fixed, paraffin-embedded human liver stained with Trance antibody (1:500, 1 ug/ml), peroxidase-conjugate and DAB chromogen. A 2 hr incubation at RT was used.



## Publications

Tanaka T, Kelly M, Takei Y, Yamanouchi D. RANKL-mediated osteoclastogenic differentiation of macrophages in the abdominal aorta of angiotensin II-infused apolipoprotein E knockout mice. *J Vasc Surg* 2018-04-20 [PMID: 29685509] (ICC/IF, Mouse)

### Details:

This citation used the Azide Free version of this antibody.

Hsu H, Lacey DL, Dunstan CR et al. Tumor necrosis factor receptor family member RANK mediates osteoclast differentiation and activation induced by osteoprotegerin ligand. *Proc Natl Acad Sci U S A*. [PMID: 10097072]

### Details:

Citation using the Azide Free form of this antibody.

Shin M, Matsuo K, Tada T et al. The inhibition of RANKL/RANK signaling by osteoprotegerin suppresses bone invasion by oral squamous cell carcinoma cells. *Carcinogenesis*. 2011-11-01 [PMID: 21890459]

Rubin J, Chung LW, Fan X et al. Prostate carcinoma cells that have resided in bone have an upregulated IGF-I axis. *Prostate*. 2004-01-01 [PMID: 14673951]

Hu P, Chu GC, Zhu G et al. Multiplexed quantum dot labeling of activated c-Met signaling in castration-resistant human prostate cancer. *PLoS One*. 2011-01-01 [PMID: 22205960]

Pearse RN, Sordillo EM, Yaccoby S et al. Multiple myeloma disrupts the TRANCE/ osteoprotegerin cytokine axis to trigger bone destruction and promote tumor progression. *Proc Natl Acad Sci U S A*. 2001-09-25 [PMID: 11562486]

### Details:

Antibodies cited [IHC (paraffin)], Figs 1 and 4 (human plasmocytoma and decalcified bone marrow): 1. OPG (IMG-103) 2. Trance/RankL/OPGL/ODF (IMG-133).

Kikuchi T, Matsuguchi T, Tsuboi N et al. Gene expression of osteoclast differentiation factor is induced by lipopolysaccharide in mouse osteoblasts via Toll-like receptors. *J Immunol*. 2001-03-01 [PMID: 11207318]

Fiumara P, Snell V, Li Y et al. Functional expression of receptor activator of nuclear factor kappaB in Hodgkin disease cell lines. *Blood*. 2001-11-01 [PMID: 11675352]

Parrula C, Zimmerman B, Nadella P et al. Expression of tumor invasion factors determines systemic engraftment and induction of humoral hypercalcemia in a mouse model of adult T-cell leukemia. *Vet Pathol*. 2009-09-01 [PMID: 19429977]

### Details:

RankL (IMG-133A) for Flow (cell surface), Fig 9 (MET-1 human leukemia cells). 33% of the cells were positive for RankL expression.

Ghoreishi M, Bach P, Obst J et al. Expansion of antigen-specific regulatory T cells with the topical vitamin d analog calcipotriol. *J Immunol*. 2009-05-15 [PMID: 19414758]

Sandra F, Hendarmin L, Kukita T et al. Ameloblastoma induces osteoclastogenesis: a possible role of ameloblastoma in expanding in the bone. *Oral Oncol*. 2005-07-01 [PMID: 15935726]

### Details:

Ameloblastoma tumor tissue and AM-1 cells: 1. OPG (IMG-103A), ELISA (detection): Results described.

## Procedures

### Western Blot protocol for TRANCE/TNF $\alpha$ /RANK L Antibody (NB100-56593)

#### Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute anti-TRANCE primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.





### Novus Biologicals USA

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### Bio-Techne Canada

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### Bio-Techne Ltd

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### General Contact Information

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### Products Related to NB100-56593

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NBL1-17162	TRANCE/TNFSF11/RANK L 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]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)

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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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