

Anti-sRANK Ligand TNFSF11 Antibody

Catalog Number: A00363-1

About TNFSF11

The receptor activator of NF-kappaB ligand (RANK-L) is a recently discovered member of the TNF-ligand family involved in the regulation of the T cell-dependent immune response, lymph node organogenesis and bone formation. RANK-L exists as both a normal, transmembrane form and a truncated, soluble form (sRANK-L), both of which can stimulate the receptor. Activation of T cells, such as by treatment with interleukin-7, induces RANK-L production and leads to an increase of osteoclast formation and bone loss. Finally, sRANK-L can activate the antiapoptotic kinase Akt through a signaling complex involving Src kinase and TRAF6, suggesting sRANK-L may also play a role in regulating apoptosis. This antibody will recognize both the soluble form and the uncleaved transmembrane form of RANK-L.

Overview

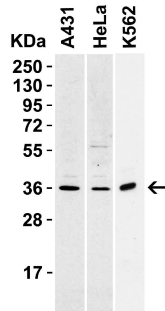
Product Name	Anti-sRANK Ligand TNFSF11 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-sRANK Ligand TNFSF11 Antibody (Catalog # A00363-1). Tested in ELISA, WB, IHC-P applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IHC-P, WB
Clonality	Polyclonal
Formulation	sRANK Ligand Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	sRANK Ligand antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	O14788

Technical Details

Immunogen	Anti-sRANK-L antibody was raised against a peptide corresponding to 14 amino acids near the center of human sRANK-L. The immunogen is located within amino acids 140-190 of sRANK-L.
Predicted Reactive Species	Mouse, Rat
Cross Reactivity	At least three isoforms of APG7 are known to exist; this antibody will detect all three isoforms. APG7 antibody is predicted not to cross-react with other ATG family proteins.
Isotype	IgG
Form	Liquid

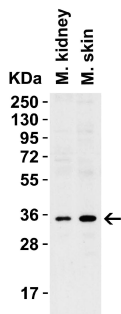
Concentration	1 mg/mL
Purification	sRANK Ligand Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: WB: 0.25-4 ug/mL; IHC: 5 ug/mL. Antibody validated: Western Blot in human, mouse and rat samples; Immunohistochemistry in human and rat samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

Anti-sRANK Ligand TNFSF11 Antibody (A00363-1) Images



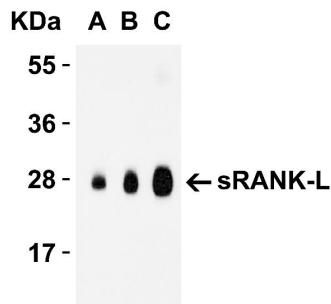
Western Blot Validation in Human Cell Lines

Loading: 15 ug of lysates per lane. Antibodies: sRANK-L A00363-1 (1 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



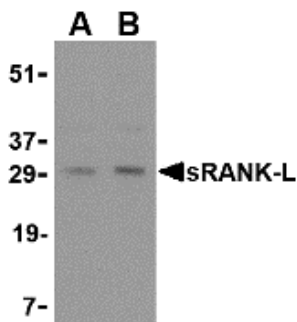
Western Blot Validation in Mouse Tissues

Loading: 15 ug of lysates per lane. Antibodies: sRANK-L A00363-1 (2 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot Validation with Recombinant Protein

Loading: 30 ng of human sRANK-L recombinant protein per lane. Antibodies: sRANK-L A00363-1 (A: 1 ug/mL, B: 2 ug/mL and C: 4 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. Observed at around 27kD.

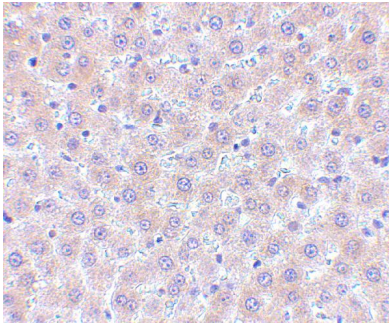


Western Blot Validation in Rat Liver Tissue

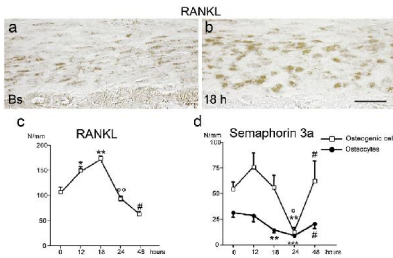
Loading: 15 ug of lysates per lane. Antibodies: sRANK-L A00363-1 (A: 0.25 ug/mL and B: 0.5 ug/mL)

Immunohistochemistry Validation of sRANK-L in Human Liver Tissue

Immunohistochemical analysis of paraffin-embedded human liver tissue using anti sRANK-L antibody (A00363-1) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were



incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunohistochemistry and Induced Expression Validation of sRANK-L in Rat Osteogenic Compartment (Hassan et al., 2017)

Protein analysis for sRANK-L by immunohistochemistry with anti-sRANK-L antibodies (A00363-1) in rat osteogenic cells. Strong immunoreactivity is shown for sRANK-L in osteogenic cells at 18hr after upper jaw molar extraction as compared to baseline.

1 Publications Citing This Product

1. PubMed ID: 33251612, Hu Y, Hao X, Liu C, Ren C, Wang S, Yan G, Meng Y, Mishina Y, Shi C, Sun H. Acvr1 deletion in osteoblasts impaired mandibular bone mass through compromised osteoblast differentiation and enhanced sRANKL-induced osteoclastogenesis. J Cell Physiol. 2020 Nov 29. doi:10.1

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