



Anti-Human RANKL (sRANK Ligand)

20150223ML



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-P204
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant hsRANKL. Anti-Human sRANKL specific antibody was purified by affinity chromatography employing immobilized hsRANKL matrix.

Target Background

Synonyms (Target):	TNFSF11; ODF; OPGL; sOdf; CD254; OPTB2; RANKL; TRANCE; hRANKL2
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RANK Ligand (receptor activator of NFκB ligand [RANKL], also called TNFrelated activation induced cytokines (TRANCE), osteoprotegerin ligand [OPGL], and osteoclast differentiation factor [ODF]), is a member of the tumor necrosis factor (TNF) family. RANK Ligand was originally identified as an immediate early gene upregulated by T cell receptor stimulation. The human RANK Ligand cDNA encodes a type II transmembrane protein of 317 amino acids with a predicted cytoplasmic domain of 47 amino acids, a 21 amino acids transmembrane region, and an extracellular domain of 249 amino acids. The extracellular domain contains two potential Nlinked glycosylation sites. Mouse and human RANK Ligand share 85% amino acid identity. RANK Ligand is primarily expressed in T cells and T cell rich organs, such as thymus and lymph nodes. The multifunctions of RANK Ligand include induction of activation of the cjun N terminal kinase, enhancement of T cell growth and dendritic cell function, induction of osteoclastogenesis, and lymph node organogenesis. RANK is the cell surface signaling receptor of RANK Ligand. RANK has been shown to undergo receptor clustering during signal transduction. Osteoprotegerin, a soluble member of the TNF receptor family which binds RANK Ligand, is a naturally occurring decoy receptor that counterbalances the effects of RANK Ligand.

Database References Target

Protein RefSeq:	NP_003692.1
Uniprot ID:	O14788
mRNA RefSeq:	NM_003701.3

Product Specifications

Species reactivity	Human
Clone/Ab feature	Rabbit IgG
Cross reactivity	Human
Host	Rabbit
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	Recombinant Human RANKL
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Sandwich ELISA: To detect hsRANKL by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required.

Western Blot: To detect hsRANKL by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hsRANKL is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

Immunohistochemistry: This antibody stained formalin-fixed, paraffin-embedded sections of human metastatic carcinoma of lymph node from breast tissue. The recommended concentration is 0.25 µg/ml with an overnight incubation at 4°C.

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!