

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TRANCE/TNFSF11/RANK L in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human TRANCE/TNFSF11/RANK L Gln73-Asp317 (Ala194Gly) Accession # O14788
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide

\*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<b>Neutralization</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.

**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

**BACKGROUND**

RANK Ligand (receptor activator of NF-κB ligand [RANKL], also called TNF-related 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 N-linked 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 multi-functions of RANK Ligand include induction of activation of the c-jun 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.

**PRODUCT SPECIFIC NOTICES**

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