

## 32-8908: Recombinant Mouse RANK/TNFRSF11A (C-6His)

**Gene :** Tnfrsf11a

**Gene ID :** 21934

**Uniprot ID :** O35305

### Description

Source: Human Cells.

MW :21.3kD.

Recombinant Mouse Receptor Activator of NF-kappa B is produced by our Mammalian expression system and the target gene encoding Val31-Ser214 is expressed with a 6His tag at the C-terminus. Receptor activator of NF- $\kappa$ B (RANK, TNFRSF11A) belongs to one member of tumor necrosis factor receptor family. It is a receptor for TNFSF11/RANKL/TRANCE/OPGL. This gene encodes a type 1 membrane protein with a 30 amino acids (aa) signal peptide, 184 aa extracellular region, a 20 aa transmembrane domain and a 391 aa cytoplasmic region. Human and murine RANK share 81% aa identity in their extracellular domains. RANK is ubiquitous highly expressed in trabecular bone, thymus, small intestine, lung, brain and kidney, but weakly expressed in spleen and bone marrow. After binding its ligand RANKL, RANK can activate signaling pathways such as NF- $\kappa$ B, JNK, ERK, p38, and Akt/PKB, through TRAF protein phosphorylation. RANK/TNFRSF11A signaling is largely considered to be growth promoting and apoptosis reducing such as the effects observed in osteoclasts. RANK/TNFRSF11A was also found to be involved in the regulation of interactions between T-cells and dendritic cells.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g

**Content :** Lyophilized from a 0.2  $\mu$ m filtered solution of PBS, pH7.4.

**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

**Amino Acid :** VTPPCTQERHYEHLGRCCSRCEPGKYLSKCTPTSDSVCLPCGPDEYLDTWNEEDKLLHKVCDAGKALVAVD  
PGNHTAPRRCACTAGYHWNSDCECCRRNTECAPGFGAQHPLQLNKDVTCTPCLLGFFSDVFSSTDKCKPWT  
NCTLLGKLEAHQGTTESDVVCSSTMLRRPPKEAQAYLPSVDHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.