

Recombinant Mouse RANKL, Tag Free

Information

Accession #	P14210
Alternate Names	CD254 antigen; CD254; ODF; OPGL; OPGLOPTB2; Osteoclast differentiation factor; RANK L; RANKL
Source	Human embryonic kidney cell, HEK293-derived mouse RANKL protein
Protein sequence	Arg72-Asp316
M.Wt	27.6 kDa
Appearance	Solution protein
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 3 years from date of receipt, -20 to -70°C as supplied.
Concentration	0. 2 mg/mL
Formulation	Dissolved in sterile PBS buffer.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	The EC50 for this effect is 0.2-1 ng/mL. Measured by its ability to induce osteoclast differentiation of RAW 264.7 mouse monocyte/macrophage cells.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.
ation. L	

Quality Control

Purity	> 95%, determined by SDS-PAGE.
Endotoxin	<0.010 EU per 1 ug of the protein by the LAL method.

Description

TRANCE/TRANCE/RANK L is a member of the tumor necrosis factor (TNF) family. TRANCE was originally identified as an immediate early gene upregulated by T cell receptor stimulation. The mouse TRANCE cDNA encodes a type II transmembrane protein of 316 amino acids with a predicted cytoplasmic domain of 48 amino acids and an extracellular domain of 247 amino acids. The extracellular domain contains two potential N-linked glycosylation sites. Mouse and human TRANCE share 85% amino acid identity. TRANCE is primarily expressed in T cells and T cell rich organs, such as thymus and lymph nodes. The multi-functions of TRANCE 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 TRANCE. RANK has

been shown to undergo receptor clustering during signal transduction. Osteoprotegrin, a soluble member of the TNF receptor family which binds TRANCE, is a naturally occurring decoy receptor that counterbalances the effects of TRANCE.

Reference

- [1]. Wong, B.R. et al. (1997) J. Biol. Chem. 272:25190.
- [2]. Anderson, D.M. et al. (1997) Nature 390:175.
- [3]. Nakagawa, N. et al. (1998) Biochem. Biophys. Res. Commun. 245:382.
- [4]. Kong, Y-Y. et al. (1999) Nature 397:315



