Recombinant Protein Technical Manual

Recombinant Human RANKL/TNFSF11 Protein (His Tag)(Active)

RPES3610

Product Data:

Product SKU: RPES3610

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: O14788

Protein Information:

Molecular Mass:	22.4 kDa
AP Molecular Mass:	20 kDa
Tag:	N-6His
Bio-activity:	Immobilized ZRKLA at 2µg/ml(100 µl/well) can bind Human OPG-His(Cat: PKSH033573) The ED50 of ZRKLA is 0.15 ug/ml .
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from a 0.2 µm filtered solution of 20mM Tris,150mM NaCl,pH8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	CD254; ODF; OPGL; RANKL; TNFSF11; CD254; Osteoclast differentiation factor; Receptor activator of nuclear factor kappa-B ligand; tumor necrosis factor ligand superfamily member 11;hRANKL2;OPTB2;RANKL;sOdf

Immunogen Information:

Sequence: Ile140-Asp317

Background:

CD254, also known as RANKL, TNFSF11, TRANCE, OPGL and ODF, is a type II membrane protein of the tumor necrosis factor (TNF) superfamily, and affects the immune system and control bone regeneration and remodeling. RANKL is the ligand of nuclear factor (NF)-κB (RANK). When RANKL binds to RANK, it will undergo trimerization and then bind to an adaptor molecule TNF receptor-associated factor 6 (TRAF6). This results in the activation of several downstream signaling cascades, including the NFκB, mitogen-activated protein kinases (MAPK), activating protein 1 (AP), and nuclear factor of activated T cells (NFATc1), resulting in the formation of multinucleated bone-resorbing osteoclasts. RANKL is widely expressed in skeletal muscle, thymus, liver, colon, small intestine, adrenal gland, osteoblast, mammary gland epithelial cells, prostate and pancreas.