

Human RANKL/TNFSF11/CD254 Protein

Cat. No. RKL-HM001

Description

Source	Recombinant Human RANKL/TNFSF11/CD254 Protein is expressed from HEK293 without tag. It contains Gly63-Asp244.
Accession	O14788-2
Molecular Weight	The protein has a predicted MW of 20.5 kDa. Due to glycosylation, the protein migrates to 30-60 kDa based on Bis-Tris PAGE resu
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

Formulation and Storage

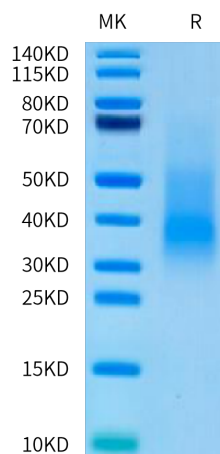
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Receptor activator of nuclear factor κB (RANK) and its ligand (RANKL) have originally been described for their key roles in bone metabolism and the immune system. Subsequently, it has been shown that the RANKL-RANK system is critical in the formation of mammary epithelia in lactating females and the thermoregulation of the central nervous system. RANKL and RANK are under the tight control of the female sex hormones estradiol and progesterone.

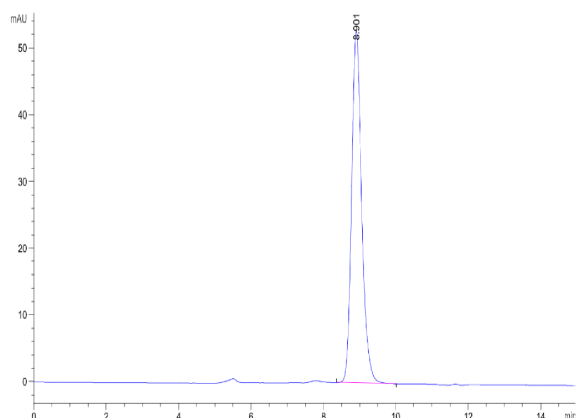
Assay Data

Bis-Tris PAGE



Human RANKL on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



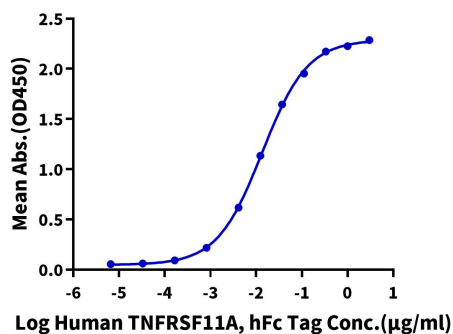
The purity of Human RANKL is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human RANKL, No Tag ELISA

0.2µg Human RANKL, No Tag Per Well

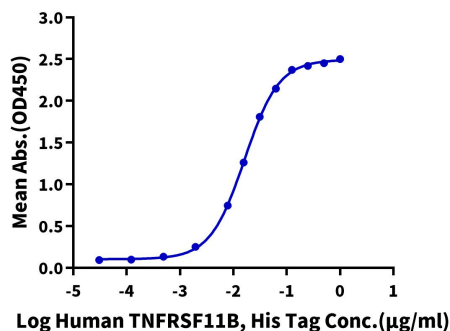


Immobilized Human RANKL, No Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for Human TNFRSF11A, hFc Tag with the EC50 of 13.6 ng/ml determined by ELISA (QC Test).

ELISA Data

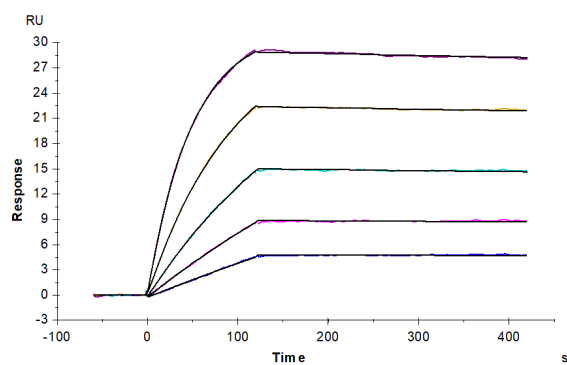
Human RANKL, No Tag ELISA

0.2µg Human RANKL, No Tag Per Well



Immobilized Human RANKL, No Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human TNFRSF11B, His Tag with the EC50 of 16.2ng/ml determined by ELISA.

SPR Data



Human TNFRSF11B, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human RANKL, No Tag with an affinity constant of 0.030 nM as determined in SPR assay (Biacore T200).