

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 Tris-Bis PAGE resu |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 90% as determined by Tris-Bis PAGE > 90% as determined by HPLC |

Formulation and Storage

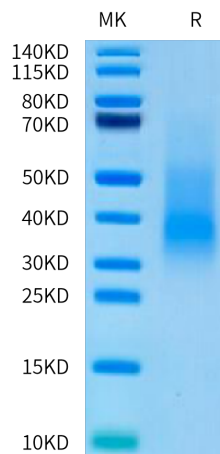
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

Receptor activator of nuclear factor x03BA;B (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.

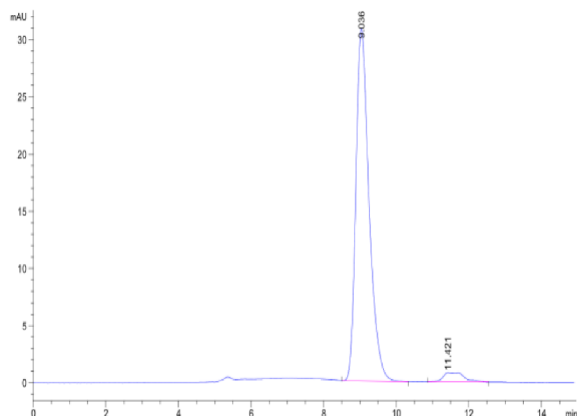
Assay Data

Tris-Bis PAGE



Human RANKL on Tris-Bis PAGE under reduced condition. The purity is greater than 90%.

SEC-HPLC



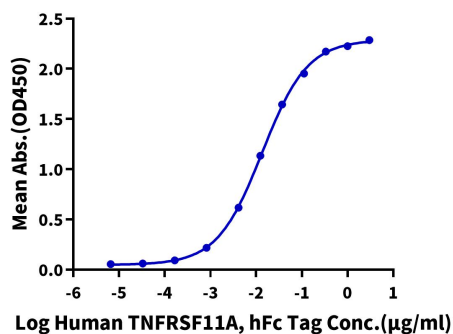
The purity of Human RANKL is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

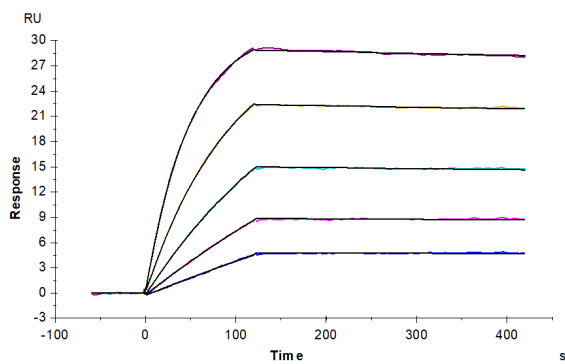
Human RANKL, No Tag ELISA

0.2µg Human RANKL, No Tag Per Well



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

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).