

Synonym

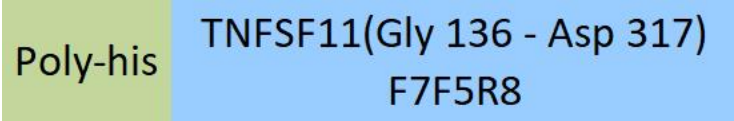
RANKL,CD254,TRANCE,OPGL,ODF

Source

Rhesus macaque TNFSF11 Protein, His Tag(RAL-R5243) is expressed from human 293 cells (HEK293). It contains AA Gly 136 - Asp 317 (Accession # [F7F5R8](#)).

Predicted N-terminus: Gly 136

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 22.4 kDa. The protein migrates as 30-33 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

Storage

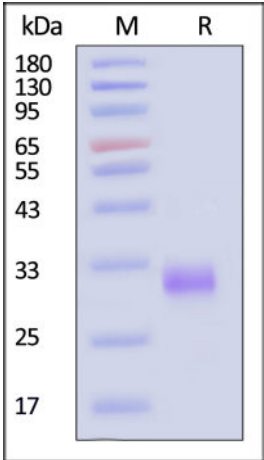
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

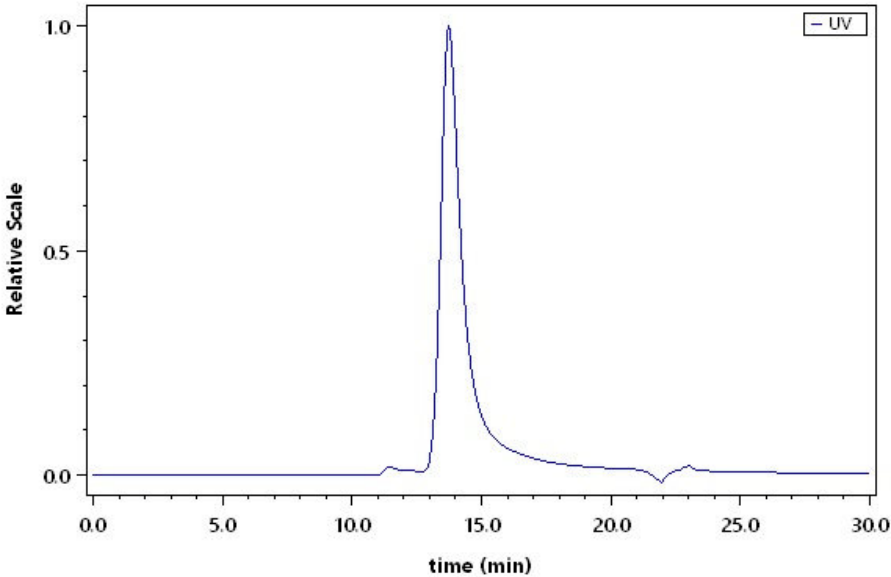
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Rhesus macaque TNFSF11 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

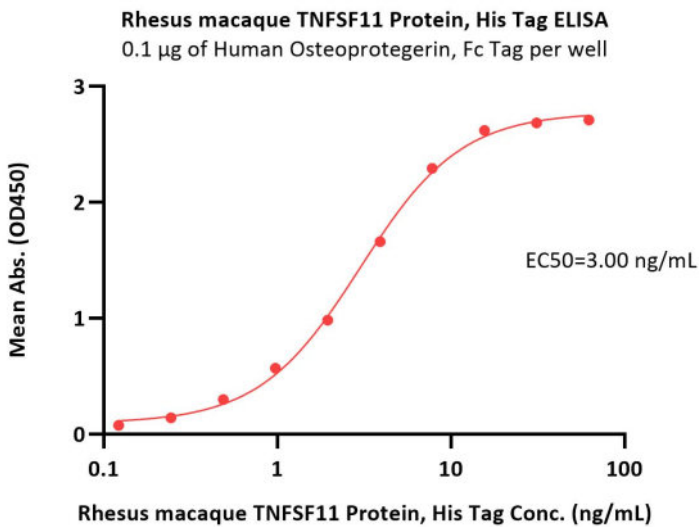
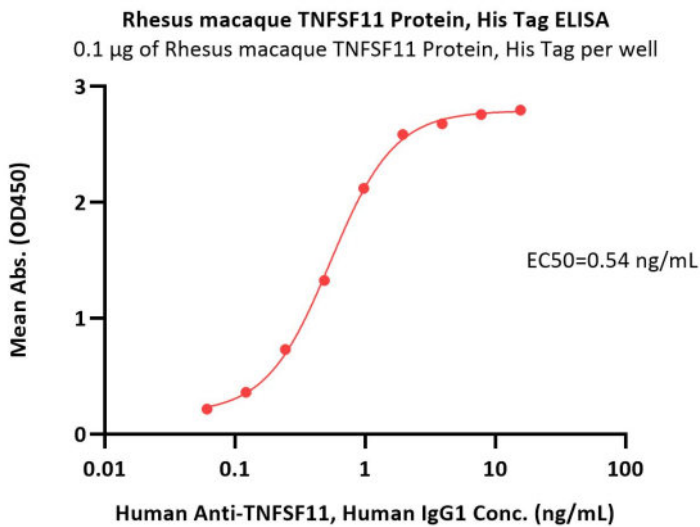
SEC-HPLC



The purity of Rhesus macaque TNFSF11 Protein, His Tag (Cat. No. RAL-R5243) was greater than 90% as determined by SEC-HPLC.

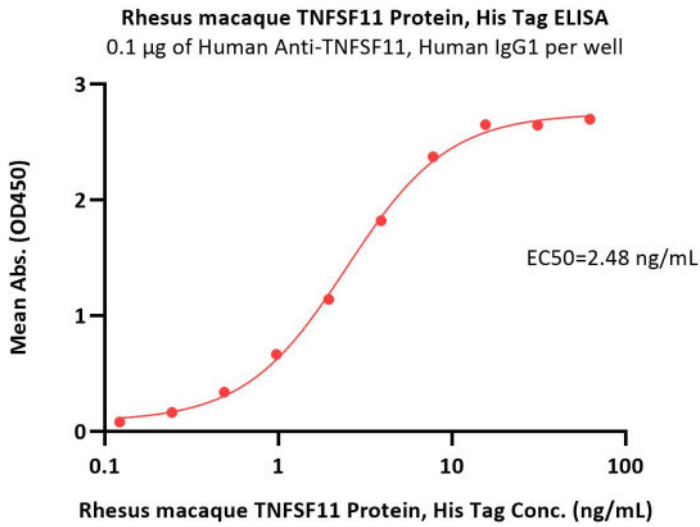
Bioactivity-ELISA





Immobilized Rhesus macaque TNFSF11 Protein, His Tag (Cat. No. RAL-R5243) at 1 µg/mL (100 µL/well) can bind Human Anti-TNFSF11, Human IgG1 with a linear range of 0.06-1 ng/mL (QC tested).

Immobilized Human Osteoprotegerin, Fc Tag (Cat. No. TNB-H5259) at 1 µg/mL (100 µL/well) can bind Rhesus macaque TNFSF11 Protein, His Tag (Cat. No. RAL-R5243) with a linear range of 0.1-8 ng/mL (Routinely tested).



Immobilized Human Anti-TNFSF11, Human IgG1 at 1 µg/mL (100 µL/well) can bind Rhesus macaque TNFSF11 Protein, His Tag (Cat. No. RAL-R5243) with a linear range of 0.1-8 ng/mL (Routinely tested).

Background

Receptor activator of nuclear factor kappa-B ligand (RANKL), also known as tumor necrosis factor ligand superfamily member 11 (TNFSF11), TNF-related activation-induced cytokine (TRANCE), osteoprotegerin ligand (OPGL), and osteoclast differentiation factor (ODF), is known as a type II membrane protein and is a member of the tumor necrosis factor (TNF) superfamily. RANKL, through its ability to stimulate osteoclast formation and activity, is a critical mediator of bone resorption and overall bone density. Some findings also suggestion some cancer cells, particularly prostate cancer cells, can activate an increase in bone remodeling and ultimately increase overall bone production.[17] This increase in bone remodeling and bone production increases the overall growth of bone metastasizes. The overall control of bone remodeling is regulated by the binding of RANKL with its receptor or its decoy receptor, respectively, RANK and OPG.

