

#### Synonym

RANKL,CD254,TRANCE,OPGL,ODF

#### Source

Cynomolgus TNFSF11 Protein, Fc Tag(RAL-C5263) is expressed from human 293 cells (HEK293). It contains AA Gly 136 - Asp 317 (Accession # A0A7N9DBU4).

Predicted N-terminus: Pro

#### **Molecular Characterization**

Fc(Pro 100 - Lys 330) TNFSF11(Gly 136 - Asp 317) P01857 A0A7N9DBU4

This protein carries a human IgG1 Fc tag at the N-terminus.

The protein has a calculated MW of 46.9 kDa. The protein migrates as 55 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

# **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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

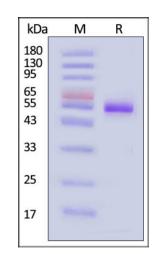
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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**



Cynomolgus TNFSF11 Protein, Fc 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

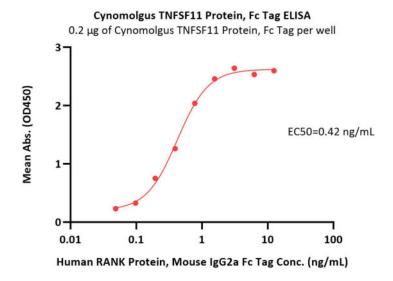
### **Bioactivity-ELISA**

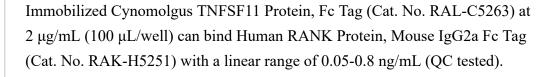


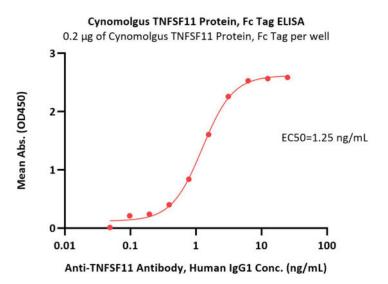
## Cynomolgus TNFSF11 / RANKL / CD254 Protein, Fc Tag

Catalog # RAL-C5263









Immobilized Cynomolgus TNFSF11 Protein, Fc Tag (Cat. No. RAL-C5263) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-TNFSF11 Antibody, Human IgG1 with a linear range of 0.01-3 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.

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.