# Human TNFRSF11A Protein (His Tag)

**Catalog Number:** **16078-H08H**

## General Information

**Gene Name Synonym:**

CD265; FEO; LOH18CR1; ODFR; OFE; OPTB7; OSTS; PDB2; RANK; TNFRSF11A; TRANCER

**Protein Construction:**

A DNA sequence encoding the human TNFRSF11A (NP_001257879.1) (Met1-Pro212) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 ℃

**Predicted N terminal:** Ile 30

**Molecular Mass:**

The recombinant human TNFRSF11A consists of 194 amino acids and predicts a molecular mass of 21.5 KDa. It migrates as an approximately 30.1 KDa band in SDS-PAGE under reducing conditions.

**Formulation:**

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

**Storage:**

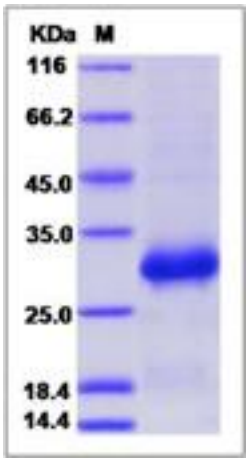
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

TNFRSF11A is a member of the TNF-receptor superfamily. In mouse, it is also known as CD265. TNFRSF11A contains 4 TNFR-Cys repeats and is widely expressed with high levels in skeletal muscle, thymus, liver, colon, small intestine and adrenal gland. It is an essential mediator for osteoclast and lymph node development. TNFRSF11A and its ligand are important regulators of the interaction between T cells and dendritic cells. It can interact with various TRAF family proteins, through which this receptor induces the activation of NF-kappa B and MAPK8/JNK. Defects in TNFRSF11A can cause familial expansile osteolysis (FEO). FEO is a rare autosomal dominant bone disorder characterized by focal areas of increased bone remodeling. Defects in TNFRSF11A also can cause Paget disease of bone type 2 (PDB2). PDB2 is a bone-remodeling disorder with clinical similarities to FEO. Defects in TNFRSF11A are the cause of osteopetrosis autosomal recessive type 7 which characterized by abnormally dense bone, due to defective resorption of immature bone.

**References**

1.Darnay B G, *et al*. (1998) Characterization of the intracellular domain of receptor activator of NF-kappaB (RANK). Interaction with tumor necrosis factor receptor-associated factors and activation of NF-kappab and c-Jun N-terminal kinase. J Biol Chem. 273(32):20551-5. 2.Darnay B G, *et al*. (1999) Activation of NF-kappaB by RANK requires tumor necrosis factor receptor-associated factor (TRAF) 6 and NF-kappaB-inducing kinase. Identification of a novel TRAF6 interaction motif. J Biol Chem. 274(12):7724-31. 3.Galibert L, *et al*. (1998) The involvement of multiple tumor necrosis factor receptor (TNFR)-associated factors in the signaling mechanisms of receptor activator of NF-kappaB, a member of the TNFR superfamily. J Biol Chem. 273(51):34120-7.