

## HUMAN TNFSF11 PROTEIN, HFC TAG

**Cat.#:** 11219

**Product Name:** Human TNFSF11 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** CD254;hRANKL2;ODF;OPGL;OPTB2;RANKL;sOdf;TNLG6B;TRANCE

**Target:** TNFSF11

**UNIPROT ID:** O14788

**Description:** Recombinant human TNFSF11 Protein with N-terminal Human Fc tag

**Background:** This gene encodes a member of the tumor necrosis factor (TNF) cytokine family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. This protein was shown to be a dendritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. This protein was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis. Targeted disruption of the related gene in mice led to severe osteopetrosis and a lack of osteoclasts. The deficient mice exhibited defects in early differentiation of T and B lymphocytes, and failed to form lobulo-alveolar mammary structures during pregnancy. Two alternatively spliced transcript variants have been found. [provided by RefSeq, Jul 2008]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 48.4 kDa after removal of the signal peptide. The apparent molecular mass of hFc-TNFSF11 is approximately 55-70 kDa due to glycosylation.

**Molecular Characterization:** hFc(Glu99-Ala330) TNFSF11(Ile140-Asp317)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

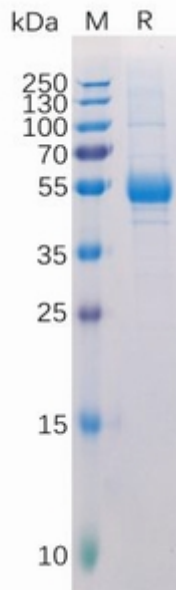


Figure 1. Human TNFSF11 Protein, hFc Tag on SDS-PAGE under reducing condition.