

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.

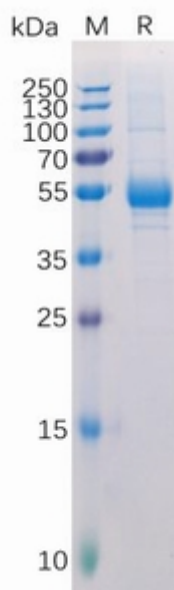


Figure 1. Human TNFSF11 Protein, hFc Tag on SDS-PAGE under reducing condition.