

HuPro®

TNFSF11 (Human) Recombinant Protein

Catalog # H00008600-H02

Size 25 ug

Specification

Product Description	Purified TNFSF11 (AAH74890.1 158 a.a. - 317 a.a.) human recombinant protein with His-Flag-Strep II tag at N-terminus expressed in human cells.
Transfected Cell Line	Human HEK293H cells
Sequence	SKLEAQPFAHLTINATDIPSGSHKVSLSWYHDRGWGKISNMTFSNGKLIVNQDGFYYLYANICFRH HETSGDLATEYLQLMVYVTKTSIKIPSSHTLMKGGSTKYWSGNSEFHFYSINVGGFFKLRSGEESISIE VSNPSLLDPDQDATYFGAFKVRDID
Host	Human
Theoretical MW (kDa)	22.88
Interspecies Antigen Sequence	Mouse (89)
Form	Liquid
Preparation Method	Transfection of pSuper-TNFSF11 plasmid into HEK293H cell, and the expressed protein was purified by <i>Strep</i> -Tactin affinity column.
Purification	<i>Strep</i> -Tactin affinity columns
Concentration	≥ 10 ug/ml
Storage Buffer	100 mM Tris-HCl pH 8.0, 150 mM NaCl, 1 mM EDTA, and 5 mM desthiobiotin.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

- SDS-PAGE
- Protein Interaction

Gene Info — TNFSF11

Entrez GeneID [8600](#)

GeneBank Accession# [BC074890.1](#)

Protein Accession# [AAH74890.1](#)

Gene Name TNFSF11

Gene Alias CD254, ODF, OPGL, OPTB2, RANKL, TRANCE, hRANKL2, sOdf

Gene Description tumor necrosis factor (ligand) superfamily, member 11

Omim ID [259710 602642](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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]

Other Designations

OTTHUMP00000178585|TNF-related activation-induced cytokine|osteoclast differentiation factor|osteoprotegerin ligand|receptor activator of nuclear factor kappa B ligand|tumor necrosis factor ligand superfamily, member 11

Pathway

- [Cytokine-cytokine receptor interaction](#)

Disease

- [Acute Disease](#)
- [Alveolar Bone Loss](#)
- [Alzheimer disease](#)
- [Arthritis](#)
- [Bone Diseases](#)
- [Bone Resorption](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Fractures](#)
- [Genetic Predisposition to Disease](#)
- [Lupus Erythematosus](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Periodontitis](#)
- [Prosthesis Failure](#)
- [Scoliosis](#)
- [Spinal Fractures](#)
- [Tobacco Use Disorder](#)