TNFSF11 (Human) ELISA Kit

Catalog # KA4051 Size 1 Kit

Specification

Product Description	TNFSF11 (Human) ELISA Kit is a sandwich enzyme immunoassay for the quantitative measurement of human TNFSF11.
Suitable Sample	Cell culture supernates, Cell Lysates, Plasma (heparin, EDTA), Serum
Sample Volume	100 uL
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	78 to 5000 pg/mL
Reactivity	Human
Regulation Status	For research use only (RUO)
Storage Instruction	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles.

Applications

- Quantification

Gene Info — TNFSF11

Entrez GeneID	8600
Gene Name	TNFSF11
Gene Alias	CD254, ODF, OPGL, OPTB2, RANKL, TRANCE, hRANKL2, sOdf

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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 dentritic cell survival factor and is involved in the regulation of T cell-de pendent immune response. T cell activation was reported to induce expression of this gene and le ad to an increase of osteoclastogenesis and bone loss. This protein was shown to activate antiap optotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis fa ctor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regul ation of cell apoptosis. Targeted disruption of the related gene in mice led to severe osteopetrosi s 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 altern atively 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 li gand superfamily, member 11

Publication Reference

- hMSC-derived VEGF release triggers the chemoattraction of alveolar osteoblasts.

  Proksch S, Bittermann G, Vach K, Nitschke R, Tomakidi P, Hellwig E.

  Stem Cells 2015 Oct; 33(10):3114.

  Application: S-ELISA, Human, Supernatants collected from Human bone marrow-derived mesenchymal stem cells

Pathway

- Cytokine-cytokine receptor interaction

Disease

- Acute Disease
- Alveolar Bone Loss
- Alzheimer disease
- Arthritis

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- 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

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