

ARG56597 anti-CD254 / RANKL antibody [2.1_3C12-2D11]

Package: 200 µg, 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [2.1_3C12-2D11] recognizes CD254 / RANKL
Tested Reactivity	Hu
Tested Application	ELISA
Host	Mouse
Clonality	Monoclonal
Clone	2.1_3C12-2D11
Isotype	IgG1, kappa
Target Name	CD254 / RANKL
Species	Human
Immunogen	E.coli derived Recombinant Human CD254 / RANKL. (MEKAMVDGSW LDLAKRSKLE AQPFAHLTIN ATDIPSGSHK VSLSSWYHDR GWAKISNMTF SNGKLIVNQD GFYYLYANIC FRHHETSGDL ATEYLQLMVY VTKTSIKIPS SHTLMKGGST KYWGSNSEFH FYSINVGGFF KLRSGEEISI EVSNPSELLDP DQDATYFGAF KVRDID)
Conjugation	Un-conjugated
Alternate Names	TRANCE; Osteoprotegerin ligand; CD254; sOdf; Receptor activator of nuclear factor kappa-B ligand; OPTB2; RANKL; OPGL; Tumor necrosis factor ligand superfamily member 11; hRANKL2; TNF-related activation-induced cytokine; Osteoclast differentiation factor; ODF; CD antigen CD254

Application Instructions

Application table	Application	Dilution
	ELISA	Sandwich: 1.0 - 2.0 µg/ml with ARG56762 as a detection antibody

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.2)
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformatics

Database links

[GeneID: 8600 Human](#)

[Swiss-port # O14788 Human](#)

Gene Symbol

TNFSF11

Gene Full Name

tumor necrosis factor (ligand) superfamily, member 11

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]

Function

Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor. Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy. [UniProt]

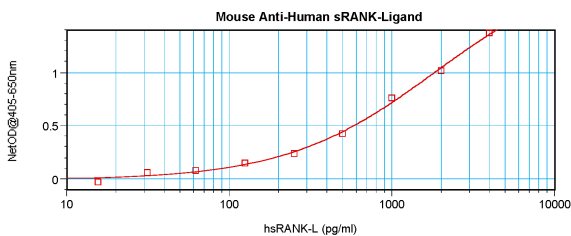
Calculated Mw

35 kDa

PTM

The soluble form of isoform 1 derives from the membrane form by proteolytic processing (By similarity). The cleavage may be catalyzed by ADAM17.

Images



ARG56597 anti-CD254 / RANKL antibody [2.1_3C12-2D11] standard curve image

Sandwich ELISA: ARG56597 anti-CD254 / RANKL antibody [2.1_3C12-2D11] as a capture antibody at 1.0 - 2.0 $\mu\text{g}/\text{ml}$ combined with ARG56762 anti-CD254 / RANKL antibody (Biotin) as a detection antibody at $\sim 0.125 - 0.25 \mu\text{g}/\text{ml}$. Results of a typical standard run with optical density.