Mouse RANKL / OPGL / TNFSF11 / CD254 Protein (Fc Tag)

Catalog Number: **50343-M01H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

Ly109l, ODF, OPG, OPGL, RANKL, Trance

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse TNFSF11 (BAA97257.1) (Arg 72-Asp 316) was fused with the Fc region of human IgG1 at the N-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 87 % as determined by SDS-PAGE

Bio-Activity

Immobilized mouse Fc-TNFSF11 at 10 μg/ml (100 μl/well) can bind biotinylated human TNFRSF11B-His (Cat:10271-H08H), The EC50 of biotinylated human TNFRSF11B-His (Cat:10271-H08H) is 0.07-0.17 μg/ml.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu

Molecular Mass:

The recombinant mouse TNFSF11/Fc is a disulfide-linked homodimer. The reduced monomer comprises 505 amino acids and has a calculated molecular mass of 56 kDa. The apparent molecular mass of the monomer is approximately 50 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

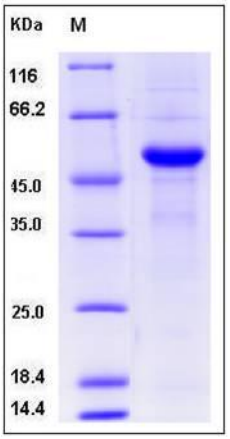
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

TNFSF11(tumor necrosis factor (ligand) superfamily, member 11,human IgG1-Fc chimera), also known as OPGL and CD254, belongs to the tumor necrosis factor (TNF) cytokine family. Tumor necrosis factor receptor is a trimeric cytokine receptor that binds tumor necrosis factors. The receptor cooperates with an adaptor protein (such as TRADD, TRAF, RIP), which is important in determining the outcome of the response. TNFSF11 is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. TNFSF11 was shown to be a dentritic cell survival factor and is involved in the regulation of T cell-dependent immune response. It 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 it may have a role in the regulation of cell apoptosis. 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.

References

1. Wong BR. et al., 1997, J Biol Chem. 272 (40): 25190-4.
2. Anderson DM. et al., 1997, Nature. 390 (6656): 175-9.
3. Schramek D. et al., 2010, Nature. 468(7320): 98-102.
4. Gonzalez-Suarez E. et al., 2010, Nature. 468 (7320): 103-7.