

Product Information

MemDX™ Antibody Discovery - Human TNFSF11 / RANKL / CD254 (64-245) Membrane

Protein, Partial, His- tag

Cat. No.: **MP0503F**

This product is for research use only and is not intended for diagnostic use.

This membrane protein is Human TNFSF11 / RANKL / CD254 (64-245). It has been tested in SDS-PAGE, ELISA, SPR, BLI, SEC-MALS. We provide this protein to facilitate your membrane protein antibody discovery and development.

Product Specifications

Host Species

Human

Target Protein

TNFSF11 / RANKL / CD254

Protein Length

ECD

Molecular Weight

The protein has a calculated MW of 22.4 kDa. The protein migrates as 30-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Sequence

AA Gly 64 - Asp 245 (Accession # AAC51762.1).

Product Description

Activity

Yes

Application

SDS-PAGE, ELISA, SPR, BLI, SEC-MALS

Expression Systems

HEK293

Tag

His tag at the N-terminus

Protein Format

Soluble

Form

LYOPH

Reconstitution

Please see Certificate of Analysis for specific instructions.

Endotoxin

<1.0 EU/μg by the LAL method

Purity

>90% as determined by SDS-PAGE

Buffer

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Storage

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

Target

Target Protein

TNFSF11 / RANKL / CD254

Full Name

TNF superfamily member 11

Introduction

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.

Alternative Names

ODF; OPGL; sOdf; CD254; OPTB2; RANKL; TNLG6B; TRANCE; hRANKL2; tumor necrosis factor ligand superfamily member 11; 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; tumor necrosis factor ligand 6B; tumor necrosis factor superfamily member 11

Gene ID

[8600](#)

UniProt ID

[Q14788](#)