

# Product Information

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

### **Protein, Partial, hlgG1 Fc- tag**

Cat. No.: **MP0502F**

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, BLI, SPR. 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 46.9 kDa. The protein migrates as 50-60 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, BLI, SPR

#### **Expression Systems**

HEK293

#### **Tag**

Human IgG1 Fc 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](#)