# abcam

## Product datasheet

## Recombinant Mouse RANK protein (His tag) ab217560

**Description** 

Product name Recombinant Mouse RANK protein (His tag)

Purity > 95 % SDS-PAGE.

Endotoxin level < 1.000 Eu/µg
Expression system HEK 293 cells

Accession <u>O35305</u>

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Mouse

**Sequence** VTPPCTQERHYEHLGRCCSRCEPGKYLSSKCTPTSDSVC

LPCGPDEYLDT

WNEEDKCLLHKVCDAGKALVAVDPGNHTAPRRCACTAG

YHWNSDCECCRR

NTECAPGFGAQHPLQLNKDTVCTPCLLGFFSDVFSSTDK

**CKPWTNCTLLG** 

KLEAHQGTTESDVVCSSSMTLRRPPKEAQAYLPSVDHHH

HHH

Predicted molecular weight 21 kDa including tags

Amino acids 31 to 214

Tags His tag C-Terminus

**Specifications** 

Our Abpromise guarantee covers the use of ab217560 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

Form Lyophilized

**Preparation and Storage** 

**Stability and Storage** Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

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pH: 7.40

Constituent: 100% PBS

#### Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Reconstitute with ddH2O to a concentration no less than 100  $\mu$ g/mL. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

#### General Info

Function Receptor for TNFSF11/RANKL/TRANCE/OPGL; essential for RANKL-mediated

osteoclastogenesis. Involved in the regulation of interactions between T-cells and dendritic cells.

**Tissue specificity** Ubiquitous expression with high levels in skeletal muscle, thymus, liver, colon, small intestine and

adrenal gland.

Involvement in disease Defects in TNFRSF11A are the cause of familial expansile osteolysis (FEO) [MIM:174810]. FEO

is a rare autosomal dominant bone disorder characterized by focal areas of increased bone remodeling. The osteolytic lesions develop usually in the long bones during early adulthood. FEO

is often associated with early onset deafness and loss of dentition.

Defects in TNFRSF11A are a cause of Paget disease of bone type 2 (PDB2) [MIM:602080]; also known as familial Paget disease of bone. PDB2 is a bone-remodeling disorder with clinical similarities to FEO. Unlike FEO, however, affected individuals have involvement of the axial

skeleton with lesions in the spine, pelvis and skull.

Defects in TNFRSF11A are the cause of osteopetrosis autosomal recessive type 7 (OPTB7) [MIM:612301]; also called osteoclast-poor osteopetrosis with hypogammaglobulinemia. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or adulthood. OPTB7 is characterized by paucity of osteoclasts, suggesting a molecular defect in osteoclast development. OPTB7 is associated with

hypogam maglobulinemia.

Sequence similarities Contains 4 TNFR-Cys repeats.

**Cellular localization** Membrane.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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