abcam

Product datasheet

Recombinant Human RANK protein ab109148

Description

Product name	Recombinant Human RANK protein
Biological activity	Inhibits Human rhsRANKL biological functions. Binds to Human and Mouse RANKL.
Purity	> 95 % SDS-PAGE.
Endotoxin level	< 0.100 Eu/µg
Expression system	HEK 293 cells
Accession	Q9Y6Q6
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	55 kDa including tags
Amino acids	29 to 313
Additional sequence information	Human RANK (aa 29-213) is fused at the C-terminus to the Fc portion of human IgG1.

Specifications

Our Abpromise guarantee covers the use of **ab109148** in the following tested applications.

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

Applications	Functional Studies SDS-PAGE
Form	Lyophilized
Additional notes	After reconstitution, prepare aliquots and store at -20°C. Avoid freeze/thaw cycles. PBS containing at least 0.1% BSA should be used for further dilutions. Inhibits Human rhsRANKL biological functions. Binds to Human and Mouse RANKL.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at 4°C (up to 6 months). Store at -20°C. Constituent: PBS
Reconstitution	Reconstitute with 50µl sterile water to give a final concentration of 1mg/ml.

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 hypogammaglobulinemia.
Sequence similarities	Contains 4 TNFR-Cys repeats.
Cellular localization	Membrane.

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