

Recombinant Mouse RANK/TNFRSF11A Protein (His Tag)

Catalog Number: PKSM041130



Note: Centrifuge before opening to ensure complete recovery of vial contents.

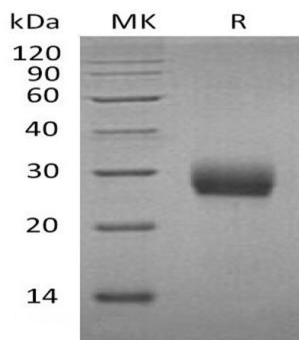
Description

| | |
|---------------------|----------------------------|
| Species | Mouse |
| Mol_Mass | 21.3 kDa |
| Accession | O35305 |
| Bio-activity | Not validated for activity |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Receptor activator of NF-κB (RANK, TNFRSF11A) belongs to one member of tumor necrosis factor receptor family. It is a receptor for TNFSF11/RANKL/TRANCE/OPGL. This gene encodes a type 1 membrane protein with a 30 amino acids (aa) signal peptide, 184 aa extracellular region, a 20 aa transmembrane domain and a 391 aa cytoplasmic region. Human and murine RANK share 81% aa identity in their extracellular domains. RANK is ubiquitous highly expressed in trabecular bone, thymus, small intestine, lung, brain and kidney, but weakly expressed in spleen and bone marrow. After binding its ligand RANKL, RANK can activate signaling pathways such as NF-κB, JNK, ERK, p38, and Akt/PKB, through TRAF protein phosphorylation. RANK/TNFRSF11A signaling is largely considered to be growth promoting and apoptosis reducing such as the effects observed in osteoclasts. RANK/TNFRSF11A was also found to be involved in the regulation of interactions between T-cells and dendritic cells.

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