Recombinant Human TNFRSF11B/Osteoprotegerin Protein

Catalog No.: RP00180 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	4982	O00300

Tags
C-His

Synonyms
TNFRSF11B; OCIF; OPG; PDB5; TR1; TNF receptor superfamily member 11b;Osteoprotegerin;OCIF;OPG;PDB5;TR1

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

www.abclonal.com

Background

Osteoprotegerin or TNFRSF11B is a member of the TNF-receptor superfamily. This protein is an osteoblast-secreted decoy receptor that functions as a negative regulator of bone resorption. This protein specifically binds to its ligand, osteoprotegerin ligand, both of which are key extracellular regulators of osteoclast development. Studies of the mouse counterpart also suggest that this protein and its ligand play a role in lymph-node organogenesis and vascular calcification.

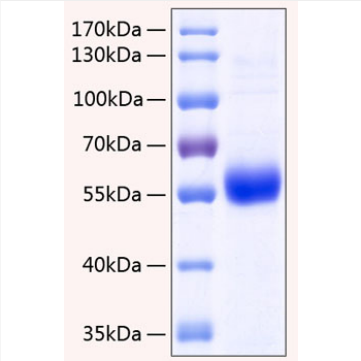
Basic Information

Description
Recombinant Human TNFRSF11B/Osteoprotegerin Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Glu22-Leu401) of human Osteoprotegerin/TNFRSF11B (Accession #NP_002537.3) fused with a 6×His tag at the C-terminus.

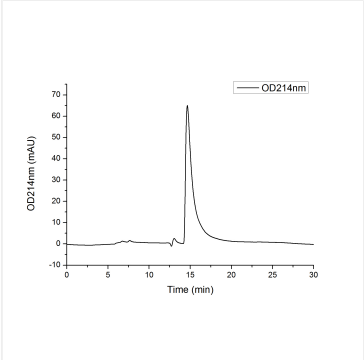
Bio-Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant human TNFRSF11B at 2 μg/mL (100 μL/well) can bind Recombinant human TNFSF11 with a linear range of 2-8 ng/mL.|2.Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L-929 mouse fibroblast cells treated with TRAIL. The ED_{50} for this effect is 28.5-114 pg/mL in the presence of 20 ng/mL Recombinant Human TRAIL/TNFSF10.

Storage
Store the lyophilized protein at -20°C to -80 °C for long term.
After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.
Avoid repeated freeze/thaw cycles.

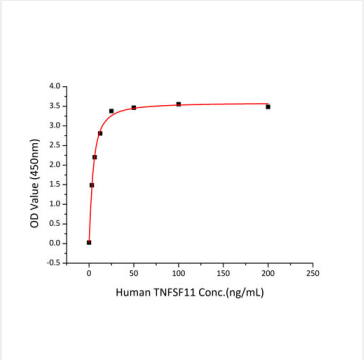
Validation Data



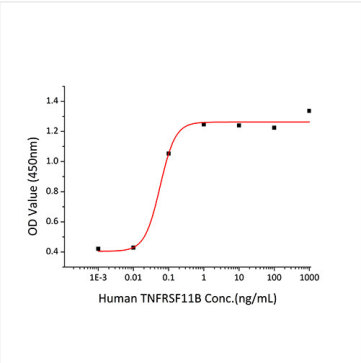
Recombinant Human TNFRSF11B/Osteoprotegerin Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 55-65 kDa.



The purity of Human Osteoprotegerin/TNFRSF11B Protein (Cat.RP00180) was greater than 95% as determined by SEC-HPLC.



Immobilized Recombinant human TNFRSF11B at 2 μg/mL (100 μL/well) can bind Recombinant human TNFSF11 with a linear range of 2-8 ng/mL.



Recombinant Human TNFRSF11B inhibit TRAIL-mediated cytotoxicity using L-929 mouse fibroblast cells treated with TRAIL. The ED_{50} for this effect is 28.5-114 pg/mL in the presence of 20 ng/mL Recombinant Human TRAIL/TNFSF10.