

Recombinant Human TNFRSF11B protein, Fc-tagged

Cat. No. TNFRSF11B-655H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human TNFRSF11B protein (Glu22-Leu401), fused to human IgG1 Fc tag at C-terminus, was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	380
Description	<p>Tumor necrosis factor receptor superfamily member 11B (TNFRSF11B) is also known as Osteoclastogenesis inhibitory factor (OCIF), Osteoprotegerin (OPG). TNFRSF11B is a secreted homodimer protein, which can interact with TNFSF10 and TNFSF11. TNFRSF11B acts as decoy receptor for TNFSF11/RANKL and thereby neutralizes its function in osteoclastogenesis. TNFRSF11B inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. TNFSF10/TRAIL binding blocks the inhibition of osteoclastogenesis.</p>
Form	Lyophilized from 0.22 um filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 70.2 kDa. The protein migrates as 90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per ug by the LAL method.

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Purity	>92% as determined by SDS-PAGE.
Storage	<p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <p>-20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.</p>
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

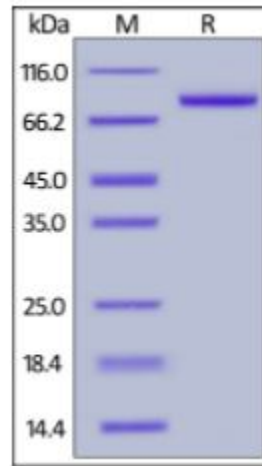
Gene Name	TNFRSF11B
Official Symbol	TNFRSF11B
Synonyms	TNFRSF11B; tumor necrosis factor receptor superfamily, member 11b; OPG, osteoprotegerin; tumor necrosis factor receptor superfamily member 11B; OCIF; TR1; osteoprotegerin; osteoclastogenesis inhibitory factor; OPG; MGC29565
Gene ID	4982
mRNA Refseq	NM_002546
Protein Refseq	NP_002537
MIM	602643
UniProt ID	O00300

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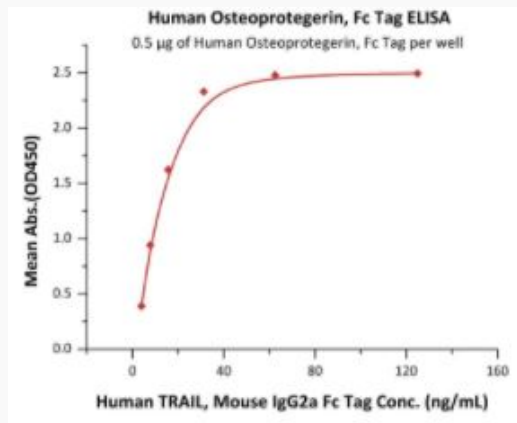
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**SDS-PAGE of
TNFRSF11B-655H**



Human OPG, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 92%.

**Bioactivity-ELISA of
TNFRSF11B-655H**



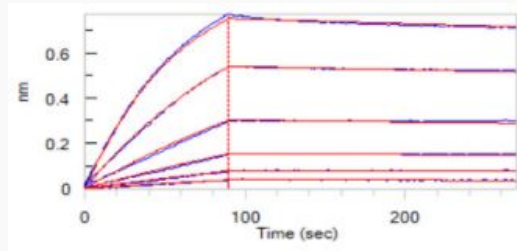
Immobilized Human Osteoprotegerin, Fc Tag at 5 µg/mL (100 µL/well) can bind Human TRAIL, Mouse IgG2a Fc Tag with a linear range of 4-16 ng/mL (QC tested).

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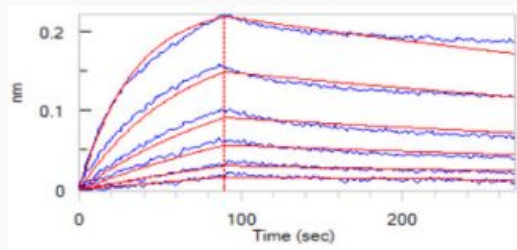
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**Bioactivity-BLI of
TNFRSF11B-655H**



Loaded Human TRAIL, His Tag on HIS1K Biosensor, can bind Human Osteoprotegerin, Fc Tag with an affinity constant of 1.65 nM as determined in BLI assay (Routinely tested).

**Bioactivity-BLI of
TNFRSF11B-655H**



Loaded Human Osteoprotegerin, Fc Tag on AHC Biosensor, can bind Human TRAIL, His Tag with an affinity constant of 2.32 nM as determined in BLI assay (Routinely tested).

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