

## ARG70269 Human TNFRSF11B / OPG recombinant protein (His-tagged, C-ter)

Package: 100 μg Store at: -20°C

# Summary

Product Description	HEK293 expressed, His-tagged (C-ter) Human TNFRSF11B / OPG recombinant protein.
Tested Reactivity	Hu
Tested Application	Binding, SDS-PAGE
Target Name	TNFRSF11B / OPG
Species	Human
A.A. Sequence	Glu22 - Leu401 of Human TNFRSF11B / OPG (NP_002537.3) with 6X His tag at the C - terminus.
Expression System	HEK293
Alternate Names	OCIF; Osteoclastogenesis inhibitory factor; Tumor necrosis factor receptor superfamily member 11B; PDB5; Osteoprotegerin; OPG; TR1

## **Application Instructions**

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant
	human TNFRSF11B at 2 $\mu$ g/ml (100 $\mu$ l/well) can bind Recombinant human TNFSF11 with a linear range
	of 2-8 ng/ml.

#### Properties

Form	Powder
Purification Note	0.22 $\mu m$ filter sterilized. Endotoxin level is 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Symbol	TNFRSF11B
Gene Full Name	tumor necrosis factor receptor superfamily, member 11b
Background	The protein encoded by this gene 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. Alternatively spliced transcript variants of this gene have been reported, but their full length nature has not been determined. [provided by RefSeq, Jul 2008]

Function	Acts as decoy receptor for TNFSF11/RANKL and thereby neutralizes its function in osteoclastogenesis. Inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. May also play a role in preventing arterial calcification. May act as decoy receptor for TNFSF10/TRAIL and protect against apoptosis. TNFSF10/TRAIL binding blocks the inhibition of osteoclastogenesis. [UniProt]
Calculated Mw	46 kDa
PTM	N-glycosylated. Contains sialic acid residues.
	The N-terminus is blocked. [UniProt]
Cellular Localization	Secreted. [UniProt]

#### Images

