

Recombinant Human TR11B Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51010

Size: 10ug, 100ug

Protein Name: Tumor necrosis factor receptor superfamily member 11B (Osteoclastogenesis inhibitory factor) (Osteoprotegerin)

Synonym: TNFRSF11B, OCIF, OPG

UniProt ID: O00300

UniProt Link: www.uniprot.org/uniprotkb/O00300/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 401 AA

Molecular Weight: 46 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNNLLCCALVFLDISIKWTTQETFPKYLHYDEETSHQLLCDKCPPGTYLKQHCTAKWKTVCAPCPD
HYYTDSWHTSDECLYCSPVCKELQYVKQECNRTHNRVCECKEGRYLEIEFCLKHRSCPPGFGVVQ
AGTPERN TVCKRCPDGFSSNETSSKAPCRKHTNCSVFGLLLTQKGNATHDNICSGNSESTQKCGID
VTLCEEAFRRFAVPTKFTPNWLSVLVDNLPGTKVNAESVERIKRQHSSQEQTFLLLKLVKHQNKDQ
DIVKKIQQIDL CENS VQRHIGHANLTFEQLRSLMESLP GK KVGAE D I E K T I K A C K P S D Q I L K L S L W R I K
NGDQDTLKGLMHALKH SKTYHFPKTVTQSLKKTIRFLHSFTMYKLYQKLFLEMIGNQVQSVKISCL

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Tumor necrosis factor receptor superfamily member 11B (Osteoclastogenesis inhibitory factor) (Osteoprotegerin) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Acts as a 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.

Subcellular Localization: Secreted.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.