For Research Use Only

Recombinant Human Osteoprotegerin/TNFRSF11B protein



(His Tag)

Catalog Number: Eg0976

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ μ g protein, LAL method

HEK293-derived Human Osteoprotegerin protein Glu22-Leu401 (Accession# 000300) with a His tag at the C-

GeneID:

4982

Accession: 000300

Predicted Molecular Mass:

44.4 kDa

50-58 kDa, reducing (R) conditions

Formulation:

Lyophilized from 0.22 $\,\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20° to -80° as lyophilized proteins.
- 3 months, -20 °C to -80 °C under sterile conditions after reconstitution.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Osteoprotegerin (OPG), also known as TNFRSF11B or OCIF, is a member of the tumor necrosis factor receptor super family (TNFRSF). It is a secreted glycoprotein that inhibits osteoclastogenesis and is involved in the regulation of bone density. Osteoprotegerin acts as decoy receptor for receptor activator of nuclear factor-kappa B ligand (RANKL) and neutralizes its function in osteoclastogenesis. Osteoprotegerin may function as a soluble decoy receptor for tumor necrosis factor (TNF)-related apoptosis inducing ligand (TRAIL) and inhibits TRAIL-induced apoptosis. TRAIL blocks osteoprotegerin mediated inhibition of osteoclastogenesis.

References

- 1. Simonet WS. et al. (1997). Cell. 189(2):309-319. 2. Emery JG. et al. (1998). J Biol Chem. 273(23):14363-14367. 3. Yasuda H. et al. (1998). Proc Natl Acad Sci U S A. 95(7):3597-3602.

Synonyms

OCIF, OPG, Osteoclastogenesis inhibitory factor, Osteoprotegerin, TNFRSF11B

Selected Validation Data



Purity of Recombinant Human Osteoprotegerin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.