

Bioactive

TNFRSF11B (Human) Recombinant Protein

Catalog # P8988

Size 50 ug

Specification

Product Description Human TNFRSF11B (O00300, 22 a.a. - 201 a.a.) partial-length recombinant protein and 232 residues from the Fc protein of human IgG1 expressed in *Pichia pastoris*.

Sequence OPG22-201:ETFPKYLHYDEETSHQLLCDKCPPGTYLKQHCTAKWKTVCAPCPDHYTDSWHTSDECLYCSPVCKELQYVKQECNRTHNRVCECKEGRYLEIEFCLKHRSCPPGFGVVQAGTPERNVCKRCPDGGFFSNETSSKAPCRKHTNCSVFGLLLTQKGNATHDNICSGNSESTQKCGIDVTL|Fc232:EPKSSDKTHTCPPCPAPEFEGAPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPTPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

Host Yeast

Theoretical MW (kDa) 109.6

Form Lyophilized

Preparation Method *Pichia pastoris* expression system

Purity > 90% by HPLC and SDS PAGE

Activity The ED₅₀ as determined by neutralizing the stimulation of U937 cells is less than 10 ng/mL, corresponding to a specific activity of > 1.0 × 10⁵ IU/mg in the presence of 10 ng/mL soluble Human RANKL (sRANKL).

Storage Buffer Lyophilized from 20mM PB, pH 6.0, 150mM NaCl and 0.02 % Tween-80.

Storage Instruction Store at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles.

Applications

- Functional Study
- SDS-PAGE

Gene Info — TNFRSF11B

Entrez GeneID [4982](#)

Protein Accession# [O00300](#)

Gene Name TNFRSF11B

Gene Alias MGC29565, OCIF, OPG, TR1

Gene Description tumor necrosis factor receptor superfamily, member 11b

Omim ID [239000](#) [602643](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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]

Other Designations osteoclastogenesis inhibitory factor|osteoprotegerin

Pathway

- [Cytokine-cytokine receptor interaction](#)

Disease

- [Acute Disease](#)
- [Alveolar Bone Loss](#)
- [Alzheimer disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Body Weight](#)

- [Bone Diseases](#)
- [Brain Ischemia](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Cerebral Hemorrhage](#)
- [Chronic Disease](#)
- [Coronary Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Neuropathies](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [Edema](#)
- [Escherichia coli Infections](#)
- [Femoral Neck Fractures](#)
- [Fractures](#)
- [Gaucher disease](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Hip Fractures](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Inflammation](#)
- [Kidney Failure](#)
- [Lupus Erythematosus](#)
- [Metabolic Syndrome X](#)

- [Neoplasms](#)
- [Obesity](#)
- [Osteitis Deformans](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Osteoporotic Fractures](#)
- [Periodontitis](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Prosthesis Failure](#)
- [Scoliosis](#)
- [Spinal Fractures](#)
- [Stroke](#)
- [Thyroid Neoplasms](#)