Active Receptor Activator Of Nuclear Factor Kappa B Ligand (RANkL)

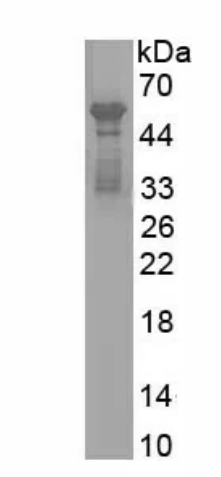
Catalog#:PEM12534

概述（Summary）

别称（Alternative Names）	CD254; TNFSF11; ODF; OPGL; TRANCE; HRANKL2; SOdf; Tumor Necrosis Factor(ligand)superfamily Member 11; TNF-related activation-induced cytokine
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu92-Trp263】
Accession #	O35235
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	49.3 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor. Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy. Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief among which is induction of long lasting oscillations in the

intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts. During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

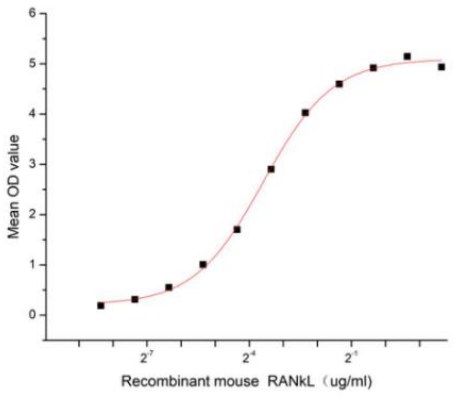


Figure 1. The binding activity of recombinant mouse RANKL and recombinant human FOS

Receptor activator of nuclear factor kappa-B ligand (RANKL), also known as tumor necrosis factor ligand superfamily member 11 (TNFSF11), TNF-related activation-induced cytokine (TRANCE), osteoprotegerin ligand (OPGL), and osteoclast differentiation factor (ODF), is a protein that in humans is encoded by the TNFSF11 gene. RANKL is a member of the tumor necrosis factor (TNF) cytokine family, it binds to RANK on cells of the myeloid lineage and functions as a key factor for osteoclast differentiation and activation. It may also bind to osteoprotegerin, a protein secreted mainly by cells of the osteoblast lineage which is a potent inhibitor of osteoclast formation by preventing binding of RANKL to RANK. V-Fos FBJ Murine Osteosarcoma Viral Oncogene Homolog (FOS) has been identified as an interactor of RANKL, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse RANKL and recombinant human FOS. Briefly, RANKL were diluted serially in PBS, with 0.01%

BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to FOS-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-RANKL pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution , wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant mouse RANKL and recombinant human FOS was shown in Figure 1, the EC50 for this effect is 0.08 ug/mL.

注意事项（Note）

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