

Mouse RANKL protein, His and GST tag

Cat. No. GTX00319-pro

Applications Functional Assay**Species** Mouse**Package**

10 µg

Applications

Application Note

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. RANKL also has a function in the immune system, where it is expressed by T helper cells and is thought to be involved in dendritic cell maturation. This protein was shown to be a dendritic cell survival factor and is involved in the regulation of T cell-dependent immune response. Besides, Peroxisome Proliferator Activated Receptor Gamma (PPARγ) has been identified as an interactor of RANKL, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse RANKL and recombinant mouse PPARγ. Briefly, RANKL were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to PPARγ-coated microtiter wells and incubated for 2h at 37°C. 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 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of RANKL and PPARγ was in a dose dependent manner.

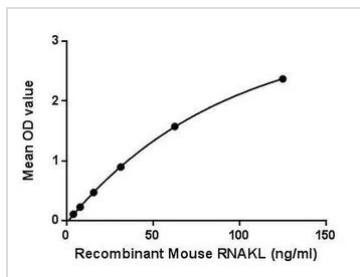
Observed MW (kDa) 49 kDa.

Properties

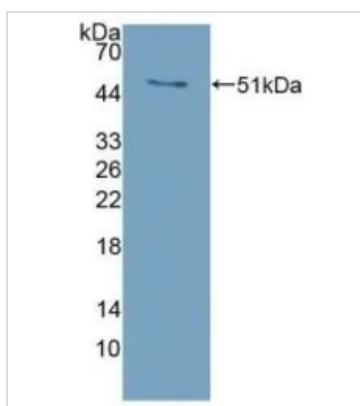
Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His and GST-Tag; Leu92~Trp263 (NP_035743.2)**Expression System** E. coli**Purity** > 90%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

For full product information, images and publications, please visit our [website](#).

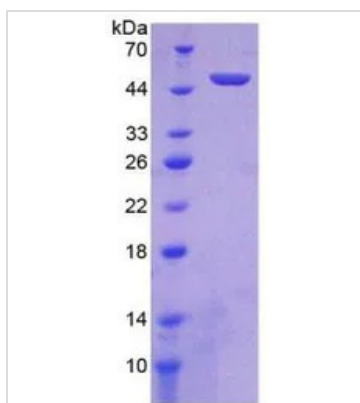
Date 2026 / 10 / 12 Page 1 of 2

DATA IMAGES

GTX00319-pro Functional Assay Image

Functional ELISA analysis of GTX00319-pro Mouse RANKL protein which can bind immobilized PPAR γ protein.


GTX00319-pro Image

WB analysis of GTX00319-pro Mouse RANKL protein.


GTX00319-pro Image

SDS-PAGE analysis of GTX00319-pro Mouse RANKL protein.



For full product information, images and publications, please visit our [website](https://www.genetex.com).