

Recombinant Human RANKL / Receptor Activator of Nuclear Factor Kappa-B Ligand, Animal Free & Carrier Free

Cat #: C-CYP238

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

RANKL and RANK are members of the TNF superfamily of ligands and receptors that is critical for the regulation of specific immunity and bone turnover. RANK receptor was originally identified as a dendritic cell-membrane protein, which, by interacting with RANKL, augments the ability of dendritic cells. These dendritic cells then stimulate naïve T cell proliferation in a mixed lymphocyte reaction, promote the survival of RANK+ T-cells, and regulate T-cell-dependent immuneresponse. RANKL, which is expressed in a variety of cells, including osteoblasts, fibroblasts, activated T cells and bone marrow stromal cells, is also capable of interacting with a decoy receptor called OPG.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

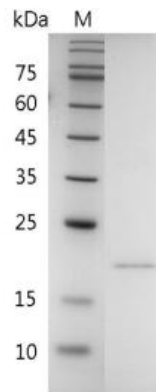
Biological Activity: Measure by its ability to induce osteoclast differentiation in RAW264.7 cells. The ED₅₀ for this effect is < 10 ng/mL.

Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence:

MEKAMVDGSWLDLAKRSKLEAQPFAHLTINATDIPSGSHKVSLSWYHDRGWAKISNMTFSNGKLIVNQDGFYYLYANICFRHHETSGDL
ATEYLQLMVVYTKTSIKIPSSHTLMKGGSTKYWSGNSEFHFYSINVGFFKLRSGEEISIEVSNPSSLDPDQDATYFGAFKVRDID with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1X PBS, pH 8.0.



SDS-PAGE analysis of recombinant human RANKL

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.