





## Human sRANKL protein

Cat #: PRP1031

Size: 2 µg/ 20 µg/ 200 µg/ 1 mg

### Product Information

	<b>Product Name:</b> Recombinant Human sRANKL protein		
	<b>Reconstitution:</b> Use the buffer we provided to reconstitute the lyophilized Human sRANKL protein		
	<b>Catalog Number:</b> PRP1031		<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> ≥98% as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Expressed Host:</b> <i>E. coli</i>
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Tumor necrosis factor ligand superfamily member 11, also known as Receptor activator of nuclear factor kappa-B ligand, Osteoprotegerin ligand, TNFSF11, RANKL, TRANCE, OPGL and CD254, 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. TNFSF11 is involved in a number of fundamental biological processes such as acting as regulator of interactions between T-cells and dendritic cells, the regulation of the T-cell-dependent immune response and enhancing bone-resorption in humoral hypercalcemia of malignancy.

**Sequence:** Amino acid sequence derived from Human sRANKL isoform (O14788) (Glu143-Asp317) was expressed.

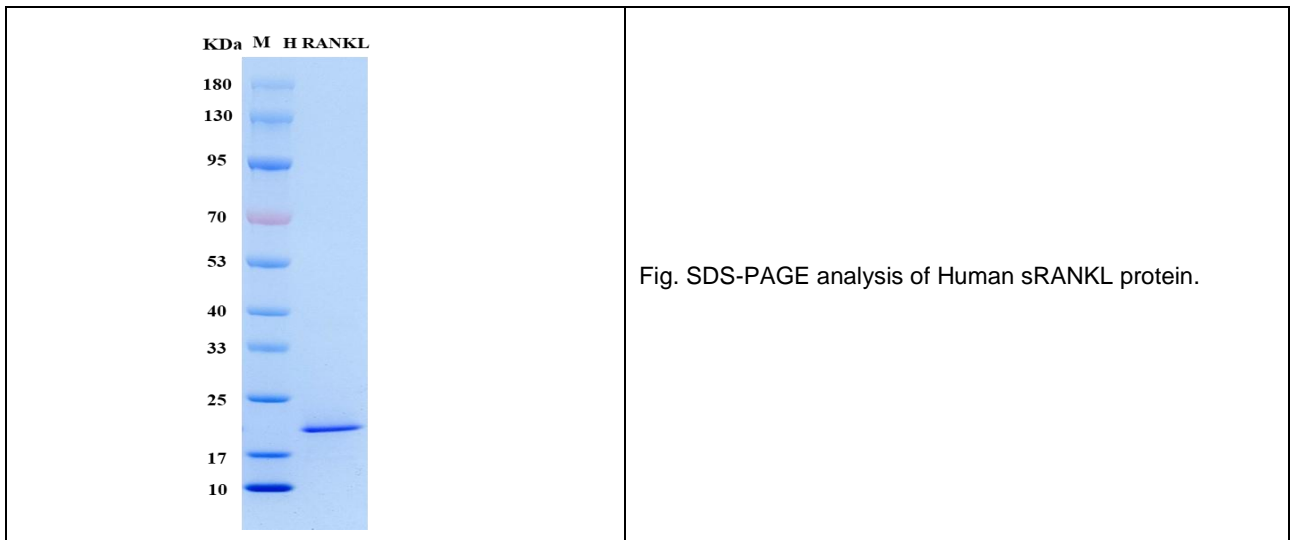
**Protein length:** The recombinant Human sRANKL consists of 175 amino acids(N-Met) and has a predicted molecular mass of 19 kDa.

**Endotoxin:** <0.1 EU per µg of the protein as determined by the LAL method.

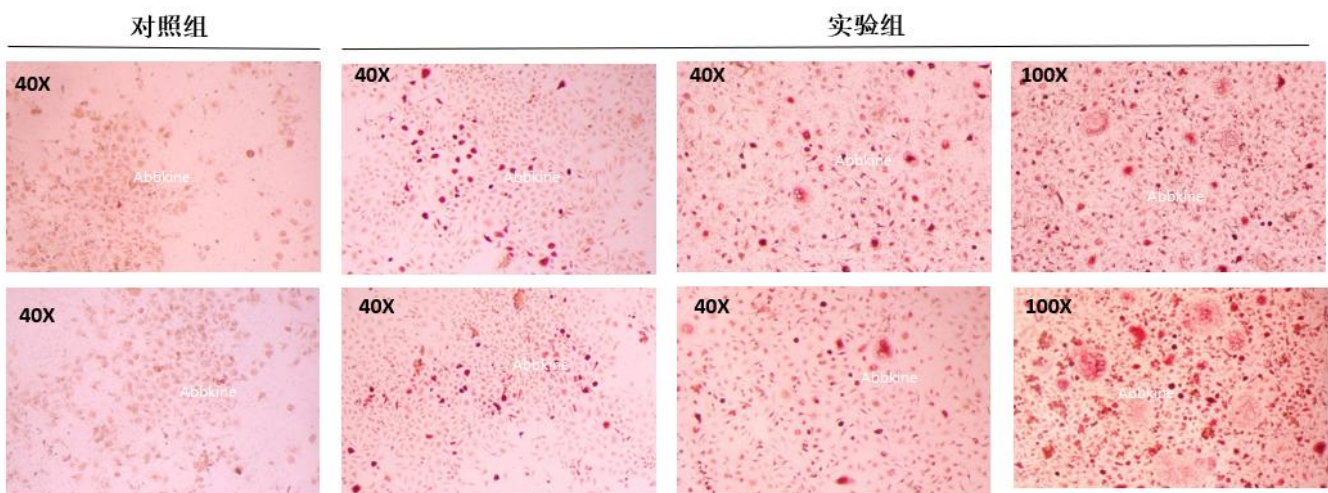
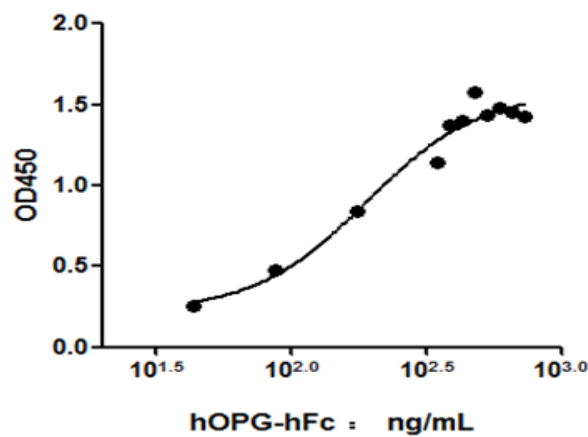
**Formulation:** Lyophilized from sterile 20 mM Tris, 150 mM NaCl, pH 8.0.

**Storage Instructions:** Lyophilized Human sRANKL protein product should be stored desiccated below -18°C for 12 months. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and below -18°C for 3 months. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to centrifuge at 12,000 rpm for 1 minute. It is recommended to reconstitute the lyophilized Human sRANKL protein using the buffer we provided not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.



**Biological Activity:** Under the presence of 40 ng/ml M-CSF and 100 ng/ml RANKL, the induction of primary mouse BMDMs to differentiate into osteoclasts is successful, with a mononuclear positivity rate of 80% and a fusion rate of  $\geq 3$  nuclei exceeding 30%; Immobilized human sRANKL protein at 1 $\mu$ g/mL (100  $\mu$ l/well) can bind Human OPG (C-Fc), The EC50 of Human OPG is 188 ng/mL. The specific activity of recombinant Human sRANKL protein is approximately  $5.32 \times 10^3$  IU/mg.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.