# Certificate of Analysis

**Recombinant Human RANK Ligand**
***Catalog Number: 100-19***
***Lot Number: 0318-100-19***

## Product Description

**Alternate Names:** TNFSF11, TRANCE, OPGL, ODF **Accession/Uniprot Number:** O14788
**Description:** Receptor activator of nuclear factor kappa-B Ligand (RANK Ligand) is a cell-bound marker related to the tumor necrosis factor (TNF) family of proteins. RANK Ligand plays a critical role in bone metabolism and osteoclast differentiation. T cell expression of RANK Ligand promotes dendritic cell maturation.
**Source:** Genetically modified *E.coli*.
**Predicted MW:** Monomer, 19.7 kDa (175 amino acids)
**AA Sequence:** EKAMVDGSWL DLAKRSKLEA QPFAHLTINA TDIPSGSHKV SLSSWYHDRG WAKISNMTFS NGKLIVNQDG FYYLYANICF RHHETSGDLA TEYLQLMVYV TKTSIKIPSS HTLMKGGSTK YWSGNSEFHF YSINVGGFFK LRSGEEISIE VSNPSLLDPD QDATYFGAFK VRDID
**Formulation:** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5

## Product Specifications

| Specification | Method of Determination | Acceptance Criteria | Result |
|---|---|---|---|
| **Purity** | Reducing and Non-reducing SDS-PAGE | ≥95% | >95% |
| **Endotoxin** | Kinetic LAL (50% confidence) | ≤ 1 EUs/ug | 0.212 EUs/ug |
| **Biological Activity** | Activity of RAW-Blue™ cells | ED50 ≤ 50 ng/mL (≥ 2.0 x 10^4 units/mg) | ED50 = 38.8 ng/mL (2.6 x 10^4 units/mg) |

## Product Preparation and Storage

**Country of Origin:** USA **Shipping:** Room temperature **Storage Prior to Reconstitution:** -20°C
**Reconstitution:** Sterile water at 0.1 mg/mL Date of Recon.:_____ Initials: _____
Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C, and avoid repeat freeze thaws.
**Expiration Date:** Date Received: _____
12 months from date of receipt when stored at -20°C to-80°C as supplied.
1 month when stored at 4°C after reconstituting as directed.
3 months when stored at -20°C to -80°C after reconstituting as directed.

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**

X Olivia Schneider, PhD 6-4-18
Quality Assurance