

# sRANKL

Soluble RANKL, recombinant from human

Host cell : *E. coli*

## Description

Receptor activator of NF- $\kappa$ B ligand (RANKL), also designated TRANCE, OPGL and ODF, is a member of the TNF family that is expressed in osteoblasts, activated T cells, and so on.

RANKL interacts with its receptor RANK expressed on osteoclast progenitors and mature dendritic cells, leading to osteoclastogenesis and T cell proliferation, respectively.

## Specification

### Appearance

Sterile filtered.

### Molecular weight

47 kDa (GST fusion protein)

### Purity

>95% by SDS-PAGE analysis

### Endotoxin level

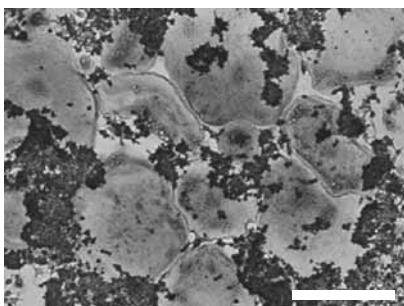
<0.01 ng/ $\mu$ g (0.1 EU/ $\mu$ g)

### Concentration

1 mg/ml (PBS + 1 mM EDTA, pH 7.4)

### Biological Activity

Measured by its ability to induce osteoclast formation in RAW264 cells using a concentration range of 1 - 5 nM.



250  $\mu$ m

Fig. 1 Tartrate-resistant acid phosphatase (TRAP) staining: RAW264 (murine macrophage cell line) cells were cultured in the presence of sRANKL (5 nM). After 5 days, the cells were fixed and stained for TRAP (a marker enzyme of osteoclast). Multinucleated giant cells are osteoclasts.

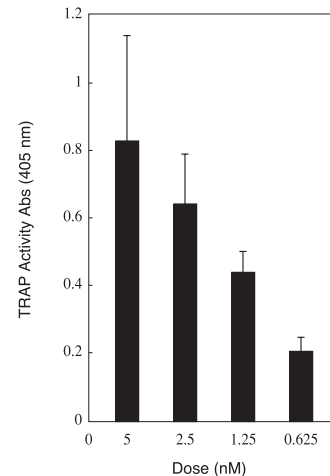


Fig.2 TRAP solution assay: RAW264 cells were cultured with sRANKL for 4 days. TRAP activity was measured by spectrometer (405 nm).

## Storage

Store below  $-70^{\circ}\text{C}$

Avoid repeated freeze-thaw cycles.

## References

- 1) Anderson, D.M. et al. (1997). *Nature*. **390** : 175-179
- 2) Wong, B.R. et al. (1997). *J. Biol. Chem.* **272** : 25190-25194
- 3) Yasuda H. et al. (1998). *Proc. Natl. Acad. Sci. USA.* **95** : 3597-3602
- 4) Lacey, D.L. et al. (1998). *Cell*. **93** : 165-176

## OYC No./Package

OYC No.	Package
47187000	20 $\mu$ g
47197900	Bulk

(Research reagent use only, not for medical use.)



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