CELL APPLICATIONS, INC.

RECOMBINANT PROTEINS

Mouse soluble Receptor Activator of NF-κB Ligand

SIZE	CAT. NO.
10 ug	RP2004-10
100 ug	RP2004-100
1000 ug	RP2004-1000

BACKGROUND

Receptor Activator of NF-κB Ligand (RANKL) is a cell-bound marker (CD254) related to the TNF family of proteins. RANKL plays a critical role in bone metabolism, particularly osteoclast differentiation. In addition, RANKL is expressed by some T cells is thought to promote dendritic cell maturation.

Recombinant mouse soluble RANK Ligand is a non-glycosylated protein, containing 174 amino acids and having a molecular weight of 19.9 kDa.

Alternative Names:
TNFSF11, TRANCE, OPGL, ODF

Amino Acid Sequence:
PAMMEGSWLD VAQRGKPEAQ PFAHLTINAA SIPSGSHKVT
LSSWYHDRGW AKISNMTLSN GKLRVNQDGF YYLYANICFR
HHETSGSVPT DYLQLMVYVV KTSIKIPSSH NLMKGGSTKN
WSGNSEFHFY SINVGGFFKL RAGEEISIQV SNPSLLDPDQ
DATYFGAFKV QDID

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
Recombinant mouse RANK Ligand is lyophilized from 10 mM Na2PO4, pH 7.5 + 50 mM NaCl.

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
Activity is measured by its ability to induce osteoclast formation on mouse RAW264.7 cells using a concentration of 5.0-10.0 ng/ml.