

# RANK (LOB14-8): sc-59349

## BACKGROUND

Members of the tumor necrosis factor (TNF) receptor superfamily interact with signaling molecules of the TNF receptor-associated factor (TRAF) family to activate the NF $\kappa$ B and JNK pathways. RANK (receptor activator of NF $\kappa$ B) is a member of the TNFR family identified on dendritic cells. This type I membrane receptor is expressed in a broad range of tissues. The C-terminus of RANK is required for RANK to bind TRAF 2, 5 and 6, and it is also necessary for stimulating NF $\kappa$ B activation. The ligand for this receptor, RANKL (also designated TRANCE or ODF), is a type II transmembrane protein expressed primarily in lymphoid tissues and T cell lines. RANKL appears to be an important regulator of T cells and osteoclasts.

## REFERENCES

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6. Wong, B.R., Josien, R., Lee, S.Y., Vologodskaya, M., Steinman, R.M. and Choi, Y. 1998. The TRAF family of signal transducers mediates NF $\kappa$ B activation by the TRANCE receptor. *J. Biol. Chem.* 273: 28355-28359.

## CHROMOSOMAL LOCATION

Genetic locus: Tnfrsf11a (mouse) mapping to 1 E2.1.

## SOURCE

RANK (LOB14-8) is a rat monoclonal antibody raised against RANK fusion protein of mouse origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

RANK (LOB14-8) is recommended for detection of RANK of mouse origin by immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for RANK siRNA (m): sc-42961, RANK shRNA Plasmid (m): sc-42961-SH and RANK shRNA (m) Lentiviral Particles: sc-42961-V.

Molecular Weight of RANK: 90 kDa.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **RANK (H-7): sc-374360** for RANK antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.