RANKL (G-1): sc-377079

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 NFkB and JNK pathways. RANK (receptor activator of NFkB) 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 TRAF2, 5 and 6, and it is also necessary for stimulating NFkB activation. The ligand for this receptor, RANKL (also designated TRANCE, OPG-L 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.

CHROMOSOMAL LOCATION
Genetic locus: TNFSF11 (human) mapping to 13q14.11; Tnfsf11 (mouse) mapping to 14 D3.

SOURCE
RANKL (G-1) is a mouse monoclonal antibody raised against amino acids 46-317 representing full length RANKL of human origin.

PRODUCT
Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RANKL (G-1) is available conjugated to agarose (sc-377079 AC), 200 µg/ml for WB, HICP and ELISA; to either phycocerythrin (sc-377079 PE), fluorescein (sc-377079 FITC), Alexa Fluor® 488 (sc-377079 AF488), Alexa Fluor® 546 (sc-377079 AF546), Alexa Fluor® 594 (sc-377079 AF594) or Alexa Fluor® 647 (sc-377079 AF647), 200 µg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-377079 AF680) or Alexa Fluor® 790 (sc-377079 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS
RANKL (G-1) is recommended for detection of RANKL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RANKL siRNA (h): sc-29464, RANKL siRNA (m): sc-32720, RANKL shRNA Plasmid (h): sc-29464-SH, RANKL shRNA Plasmid (m): sc-32720-SH, RANKL shRNA (h) Lentiviral Particles: sc-29464-V and RANKL shRNA (m) Lentiviral Particles: sc-37270-V.

Molecular Weight of RANKL full length: 35-40 kDa.

Molecular Weight of membrane bound RANKL: 35-40 kDa.

Molecular Weight of soluble RANKL: 20-30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HUV-EC-C whole cell lysate: sc-364180 or LNCaP cell lysate: sc-2231.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:

DATA
RANKL (G-1): sc-377079. Near-infrared western blot analysis of RANKL expression in HeLa (A), HUV-EC-C (B) and LNCaP (C) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG BP-CL 680: sc-516180.

SELECT PRODUCT CITATIONS

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

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