

For Research Use Only

TNFSF11/RANKL Recombinant monoclonal antibody

Catalog Number: 85321-2-RR



Basic Information

Catalog Number: 85321-2-RR	GenBank Accession Number: NM_003701	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 8600	CloneNo.: 251930C5
Source: Rabbit	UNIPROT ID: O14788	Recommended Dilutions: WB: 1:2000-1:10000 IF/ICC: 1:200-1:800 FC (Intra): 0.25 ug per 10 ⁶ cells in a 100 µl suspension
Isotype: IgG	Full Name: tumor necrosis factor (ligand) superfamily, member 11	
Immunogen Catalog Number: EG2564	Calculated MW: 28KD	
	Observed MW: 35 kDa	

Applications

Tested Applications: WB, IF/ICC, FC (Intra), ELISA	Positive Controls: WB : THP-1 cells, Raji cells, RAW 264.7 cells
Species Specificity: human, mouse	IF/ICC : THP-1 cells, FC (Intra) : MJ cells,

Background Information

TNFSF11 also known as RANKL, is a member of the tumor necrosis factor (TNF) cytokine family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. RANKL is a polypeptide of 217 amino acids that exerts its biological activity both in a transmembrane form of about 40-45 kDa and in soluble one of 31 kDa (PMID: 15308315). The membrane-bound RANKL (mRANKL) is cleaved into a sRANKL by the metalloprotease-disintegrin TNF-alpha convertase (TACE) or a related metalloprotease (MP). RANKL induces osteoclast formation through its receptor, RANK, which transduces signals by recruiting adaptor molecules, such as the TNF receptor-associated factor (TRAF) family of proteins. RANKL was shown to be a dendritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. RANKL was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis.

Storage

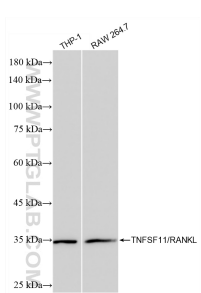
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

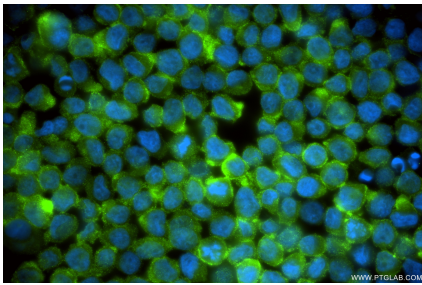
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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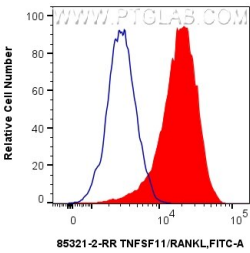
Selected Validation Data



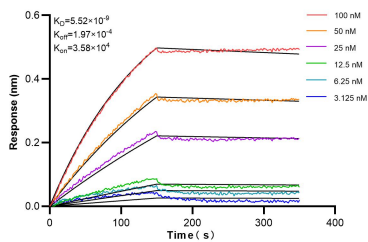
Various lysates were subjected to SDS PAGE followed by western blot with 85321-2-RR (TNFSF11/RANKL antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using TNFSF11/RANKL antibody (85321-2-RR, Clone: 251930C5) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1×10^6 MJ cells were intracellularly stained with 0.25 μ g TNFSF11/RANKL Recombinant monoclonal antibody (85321-2-RR, Clone:251930C5) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 μ g Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019).



Biolayer interferometry (BLI) kinetic assays of 85321-2-RR against Human TNFSF11/RANKL were performed. The affinity constant is 5.52 nM.