

For Research Use Only

Osteopontin Recombinant antibody

Catalog Number: 83413-6-RR



Basic Information

Catalog Number: 83413-6-RR	GenBank Accession Number: NM_001204233.1	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 20750	CloneNo.: 240250A1
Source: Rabbit	UNIPROT ID: Q547B5	Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:125-1:500
Isotype: IgG	Full Name: secreted phosphoprotein 1	
	Calculated MW: 32kd	
	Observed MW: 60 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls: WB : RAW 264.7 cells, IF/ICC : LPS and Brefeldin A treated RAW 264.7 cells,
Species Specificity: mouse	

Background Information

Osteopontin (OPN) is also named as 2AR, minopontin, bone sialoprotein 1, Spp1, Eta-1 and Op, and belongs to the osteopontin family. Osteopontin is major non-collagenous bone protein that binds tightly to hydroxyapatite. It is a highly phosphorylated glycoposphoprotein having acidic characteristics and rich in aspartic acid (PMID: 30003880). And it acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type I immunity (PMID:2351930, PMID:10657301). OPN, a multifunctional protein, has important functions on cardiovascular diseases, cancer, diabetes and kidney stone diseases and in the process of inflammation, biomineralization, cell viability and wound healing (PMID: 30003880). Osteopontin (OPN) is a pleiotropic glycoprotein expressed in various cell types in animals and in humans, including bone, immune, smooth muscle, epithelial and endothelial cells. Moreover, OPN is found in kidneys (in the thick ascending limbs of the loop of Henle and in distal nephrons) and urine (PMID:30456594).

Storage

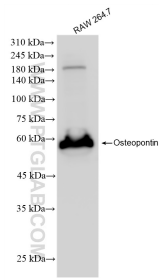
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

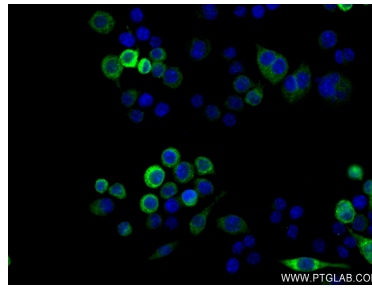
For technical support and original validation data for this product please contact:
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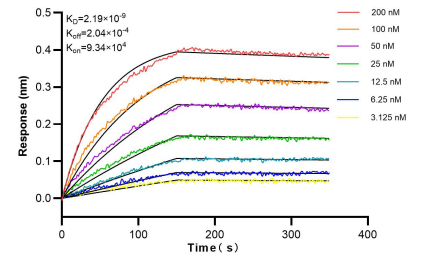
Selected Validation Data



RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 83413-6-RR (Osteopontin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed LPS and Brefeldin A treated RAW 264.7 cells using Osteopontin antibody (83413-6-RR, Clone: 240250A1) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 83413-6-RR against Mouse Osteopontin were performed. The affinity constant is 2.19 nM.