

For Research Use Only

CD38 Recombinant antibody, PBS Only (Detector)

Catalog Number: 84070-2-PBS



Basic Information

Catalog Number: 84070-2-PBS	GenBank Accession Number: BC007964	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 952	CloneNo.: 241246B1
Source: Rabbit	ENSEMBL Gene ID: ENSG00000004468	
Isotype: IgG	UNIPROT ID: P28907	
	Full Name: CD38 molecule	
	Calculated MW: 300 aa, 34 kDa	
	Observed MW: 42 kDa	

Applications

Tested Applications:
WB, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Product Information

84070-2-PBS targets CD38 as part of a matched antibody pair:

MP00991-1: 84070-4-PBS capture and 84070-2-PBS detection (validated in Cytometric bead array)

MP00991-2: 84070-1-PBS capture and 84070-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

MP00991-3: 84070-3-PBS capture and 84070-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

CD38, also known as ADP-ribosyl cyclase 1, is a type II transmembrane glycoprotein with a short N-terminal cytoplasmic tail, a single membrane-spanning domain, and a C-terminal extracellular region with four N-glycosylation sites (PMID: 2319135). The extracellular domain of CD38 has bifunctional enzyme activities that catalyze synthesis of cyclic ADP ribose from nicotinamide adenine dinucleotide (NAD) and hydrolysis of cyclic ADP ribose to adenosine diphosphoribose (PMID: 10636863). CD38 is expressed on a variety of hematopoietic and non-hematopoietic cells and is involved in diverse processes such as generation of calcium-mobilizing metabolites, cell activation, and chemotaxis (PMID: 25938500).

Storage

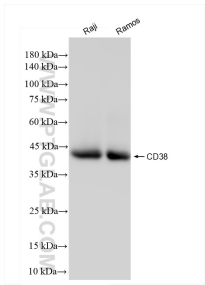
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

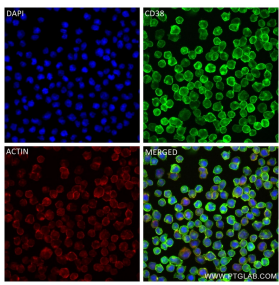
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

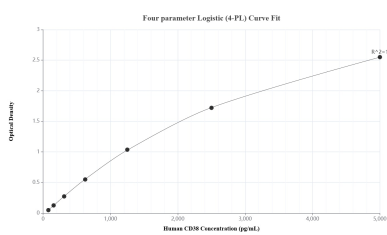
Selected Validation Data



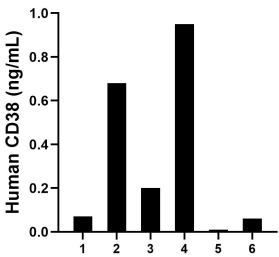
Various lysates were subjected to SDS PAGE followed by western blot with 84070-2-RR (CD38 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84070-2-PBS in a different storage buffer formulation.



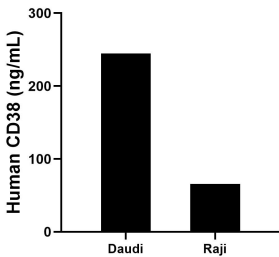
Immunofluorescent analysis of (4% PFA) fixed Raji cells using CD38 antibody (84070-2-RR, Clone: 241246B1) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84070-2-PBS in a different storage buffer formulation.



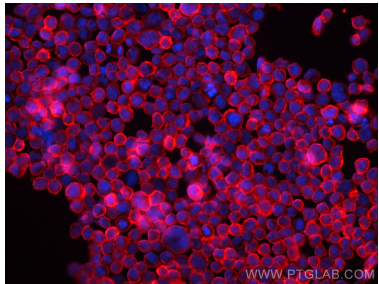
Sandwich ELISA standard curve of MP00991-2, Human CD38 Recombinant Matched Antibody Pair - PBS only. 84070-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0110. 84070-2-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



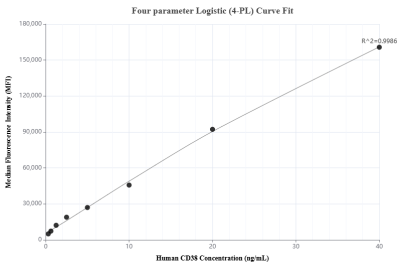
Serum of six individual healthy human donors was measured. The CD38 concentration of detected samples was determined to be 0.3 ng/mL with a range of ND-1.0 ng/mL.



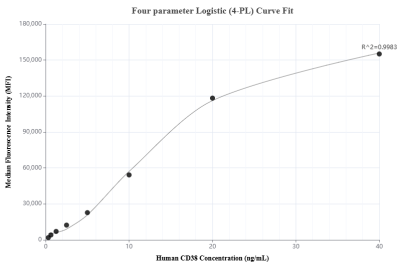
The mean CD38 concentration was determined to be 244.5 ng/mL in Daudi cell extract based on a 1.8 mg/mL extract load and 65.6 ng/mL in Raji cell extract based on a 1.2 mg/mL extract load.



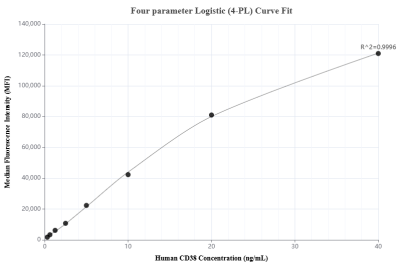
Immunofluorescent analysis of (4% PFA) fixed Raji cells using CD38 antibody (84070-2-RR, Clone: 241246B1) at dilution of 1:500 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). This data was developed using the same antibody clone with 84070-2-PBS in a different storage buffer formulation.



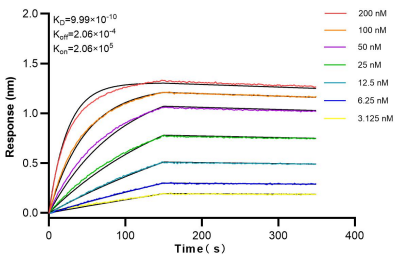
Cytometric bead array standard curve of MP00991-1, CD38 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84070-4-PBS. Detection antibody: 84070-2-PBS. Standard: Eg0110. Range: 0.313-40 ng/mL.



Cytometric bead array standard curve of MP00991-2, CD38 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84070-1-PBS. Detection antibody: 84070-2-PBS. Standard: Eg0110. Range: 0.313-40 ng/mL.



Cytometric bead array standard curve of MP00991-3, CD38 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84070-3-PBS. Detection antibody: 84070-2-PBS. Standard: Eg0110. Range: 0.313-40 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 84070-2-RR against Human CD38 were performed. The affinity constant is 0.999 nM.