For Research Use Only

## CD38 Recombinant antibody, PBS Only (Detector)

Catalog Number:84070-2-PBS



**Basic Information** 

Catalog Number:

Size:

84070-2-PBS

GeneID (NCBI):

BC007964

1 mg/ml 95

 Source:
 ENSEMBL Gene ID:

 Rabbit
 ENSG00000004468

 Isotype:
 UNIPROT ID:

 IgG
 P28907

Full Name: CD38 molecule Calculated MW: 300 aa, 34 kDa Observed MW: 42 kDa

GenBank Accession Number:

Purification Method: Protein A purification

CloneNo.:

241246B1

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

Species Specificity:

human

**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: 2519135). 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

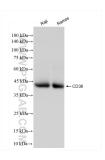
Storage:

Store at -80°C.

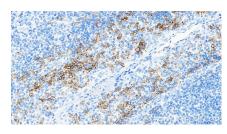
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

## Selected Validation Data



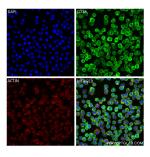
Various lysates were subjected to SDS PAGE followed by western blot with 84070-2-RR (CD38 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84070-2-PBS in a different storage buffer formulation.



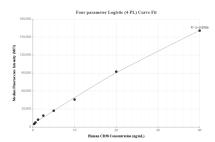
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84070-2-RR (CD38 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84070-2-PBS in a different storage buffer formulation.



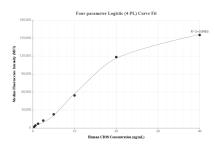
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84070-2-RR (CD38 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84070-2-PBS in a different storage buffer formulation.



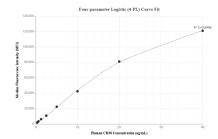
Immunofluorescent analysis of (4% PFA) fixed Raji cells using CD38 antibody (84070-2-RR, Clone: 241246B1) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84070-2-PBS in a different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



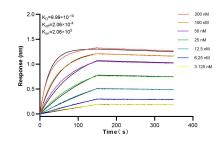
Cytometric bead array standard curve of MP00991-1, CD38 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84070-4-PBS. Detection antibody: 84070-2-PBS. Standard: Eg0110. Range: 0.313-40 ng/mL



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