

For Research Use Only

# CD38 Recombinant antibody

Catalog Number: 84070-2-RR



## Basic Information

<b>Catalog Number:</b> 84070-2-RR	<b>GenBank Accession Number:</b> BC007964	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 952	<b>CloneNo.:</b> 241246B1
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000004468	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P28907	
	<b>Full Name:</b> CD38 molecule	
	<b>Calculated MW:</b> 300 aa, 34 kDa	
	<b>Observed MW:</b> 42 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** Raji cells, A549 cells, MOLT-4 cells, Ramos cells

**IHC:** human tonsillitis tissue,

**IF/ICC:** Raji cells,

## 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 -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**

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

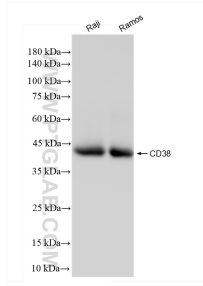
T: 4006900926

E: Proteintech-CN@ptglab.com

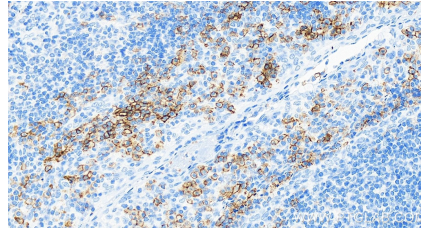
W: ptgcn.com

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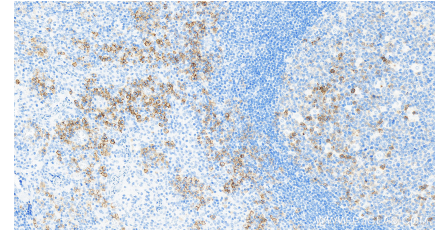
## Selected Validation Data



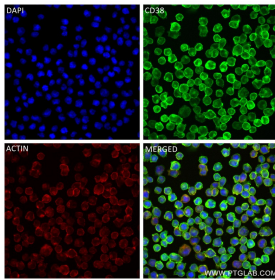
Various lysates were subjected to SDS PAGE followed by western blot with 84070-2-RR (CD38 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



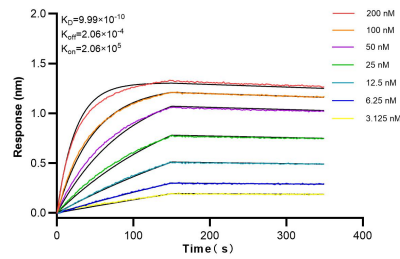
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 84070-2-RR (CD38 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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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).



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