

# CD38 Antibody

Rabbit mAb

Catalog # AP90746

## Product Information

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<b>Application</b>	WB, IHC
<b>Primary Accession</b>	<a href="#">P28907</a>
<b>Reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	CD38 antigen; ADP ribosyl cyclase 1; Cd38-rs1; ADP ribosyl cyclase; ADP ribosyl cyclase/cyclic ADP-ribose hydrolase; ADP-ribosyl cyclase 1; cADPr hydrolase 1; CD38 antigen (p45); CD38 molecule;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	34328

## Additional Information

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<b>Dilution</b>	WB 1:500~1:2000 IHC 1:100~1:500
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human CD38
<b>Description</b>	CD38 is a transmembrane protein involved in several important biological processes, including immune response, insulin secretion, and social behavior. Synthesizes cyclic ADP-ribose, a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

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<b>Name</b>	CD38
<b>Function</b>	Multifunctional transmembrane glycoprotein able to exert enzymatic activities and also to mobilize calcium, to transduce signals, to adhere to hyaluronan and to other ligands. Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed: <a href="#">7961800</a> , PubMed: <a href="#">8253715</a> ). Synthesizes the Ca(2+) mobilizer nicotinate-adenine dinucleotide phosphate, NAADP(+), from 2'-phospho-cADPR and nicotinic acid, as well as from NADP(+) and nicotinic acid. At both pH 5.0 and pH 7.4 preferentially transforms 2'- phospho-cADPR into NAADP(+), while preferentially cleaving NADP(+) to cADPR and ADPRP rather than into NADDP(+) (PubMed: <a href="#">16690024</a> ). Has cADPR hydrolase activity (PubMed: <a href="#">7961800</a> , PubMed: <a href="#">8253715</a> ). Functions also as a receptor that binds the ligand CD31 on endothelial cells, promoting lymphocyte activation,

proliferation, and migration across the endothelial barrier (PubMed:[9551996](#)). Involved in the regulation of crucial dendritic cell functions acquired at the mature stage, such as CCL21-driven migration, survival, and Th1-polarizing activity (PubMed:[16293598](#)). In lamina propria T lymphocytes, CD38/CD31 cognate interactions initiate a multistep signaling pathway resulting in activation of LCK and LAT, followed by cytokine release (PubMed:[11259373](#)).

**Cellular Location**

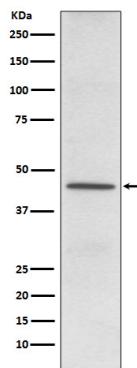
Cell surface. Cell membrane; Single-pass type II membrane protein.  
Note=Localizes in membrane lipid domains.

**Tissue Location**

Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.

## Images

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Western blot analysis of CD38 expression in HeLa cell lysate.

Image not found : 202311/AP90746-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human tonsil, using CD38 Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.