

# CD38 (ADP Ribosyl Cyclase I) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone AT2 ]  
Catalog # AH12736

## Product Information

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Application	IF, FC
Primary Accession	<a href="#">P28907</a>
Other Accession	<a href="#">952</a> , <a href="#">479214</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG3, kappa
Clone Names	AT2
Calculated MW	34328

## Additional Information

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Gene ID	952
Other Names	ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1, 3.2.2.6, 2'-phospho-ADP-ribosyl cyclase, 2'-phospho-ADP-ribosyl cyclase/2'-phospho-cyclic-ADP-ribose transferase, 2.4.99.20, 2'-phospho-cyclic-ADP-ribose transferase, ADP-ribosyl cyclase 1, ADPRC 1, Cyclic ADP-ribose hydrolase 1, cADPr hydrolase 1, T10, CD38, CD38
Application Note	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD38 (ADP Ribosyl Cyclase I) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	CD38
Function	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 NAADP(+) (PubMed: <a href="#">16690024</a> ). Has cADPR hydrolase activity (PubMed: <a href="#">7961800</a> , PubMed: <a href="#">8253715</a> ).

<b>Cellular Location</b>	Cell surface. Membrane; Single-pass type II membrane protein
<b>Tissue Location</b>	Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.

## Background

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This MAb reacts with a 45kDa glycopeptide, which is a type II membrane glycoprotein with a transmembrane sequence near the NH<sub>2</sub>terminus. CD38 is a type II transmembrane glycoprotein that is present on early B- and T-cell lineages and activated B- and T-cells but is absent from most mature resting peripheral lymphocytes. CD38 is also found on thymocytes, pre-B cells, germinal center B-cells, mitogen-activated T-cells, monocytes and Ig-secreting plasma cells. CD38 is expressed on CD34<sup>+</sup> cells. The CD34<sup>+</sup>CD38<sup>-</sup> population of hematopoietic stems cells defines the most pluripotent cells (e.g. blast colony forming cells).

## References

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Deaglio S et. al. J Immunol. 1998;160(1):395-402

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