

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

Mouse Monoclonal Antibody [Clone AT1] Catalog # AH12732

Product Information

Application	IF, FC
Primary Accession	<u>P28907</u>
Other Accession	<u>952, 479214</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	AT1
Calculated MW	34328

Additional Information

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

Name	CD38
Function	Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed: <u>7961800</u> , PubMed: <u>8253715</u>). 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: <u>16690024</u>). Has cADPR hydrolase activity (PubMed: <u>7961800</u> , PubMed: <u>8253715</u>).

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

Background

CD38 is a type II transmembrane glycoprotein that is present on early B- and T-cell lineages and activated Band 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+ cells. The CD34+CD38- population of hematopoietic stems cells defines the most pluripotent cells (e.g. blast colony forming cells).

References

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'.