

CD38 Polyclonal Antibody

Catalog # AP73575

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P28907
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34328

Additional Information

Gene ID	952
Other Names	CD38; ADP-ribosyl cyclase 1; Cyclic ADP-ribose hydrolase 1; cADPr hydrolase 1; T10; CD38
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	CD38
Function	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: 7961800 , PubMed: 8253715). 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: 16690024). Has cADPR hydrolase activity (PubMed: 7961800 , PubMed: 8253715). 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.

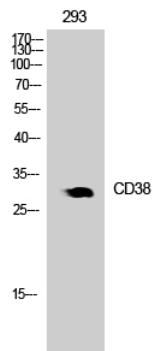
Tissue Location

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

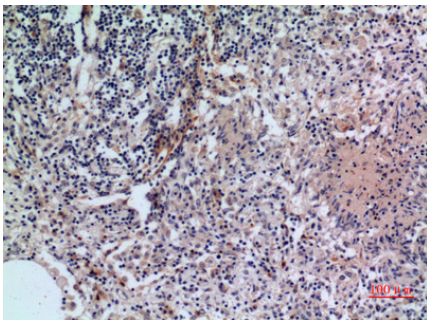
Background

Synthesizes the second messengers cyclic ADP-ribose and nicotinate-adenine dinucleotide phosphate, the former a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system.

Images



Western Blot analysis of 293 cells using CD38 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Immunohistochemical analysis of paraffin-embedded human lung, antibody was diluted at 1:100

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