

CD38

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22413a

Product Information

Application	WB, IHC-P, E
Primary Accession	<u>P28907</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Clone Names	R03676
Calculated MW	34328

Additional Information

Gene ID	952
Other Names	ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1, 3.2.2, 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
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.
Dilution	WB~~1:2000 IHC-P~~1ug/ml E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD38 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

Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed:<u>8253715</u>, PubMed:<u>7961800</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>8253715</u>, PubMed:<u>7961800</u>).

References

Jackson D.G., et al.J. Immunol. 144:2811-2815(1990). Nata K., et al.Gene 186:285-292(1997). States D.J., et al.Trends Biochem. Sci. 17:495-495(1992). Takasawa S., et al.J. Biol. Chem. 268:26052-26054(1993). Tohgo A., et al.J. Biol. Chem. 269:28555-28557(1994).

Images



Immunohistochemical analysis of paraffin-embedded Human Tonsil tissue using CD38 antibody (C-term) performed on the Abcarta® FAIP-48T Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems(Abcepta:ADR005) was used as the secondary antibody.

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