

#### **CD38**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22413a

## **Specification**

#### **CD38 - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB, IHC-P,E P28907 Human Rabbit polyclonal Rabbit Ig 34328

#### **CD38 - 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~~1:1000 IHC-P~~1ug/ml

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

## **CD38 - 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**

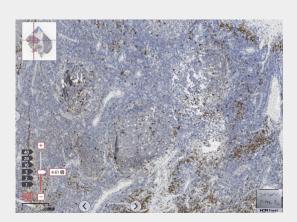
Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.

#### CD38 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CD38 - 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

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was used as the secondary antibody.

## CD38 - Background

Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed:8253715, PubMed:7961800). Synthesizes the Ca(2+) mobilizer nicotinate-adenine dinucleotide phosphate, NAADP(+), from 2'-phospho-cADPR and nicotinic acid, as well as from





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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:8253715, PubMed:7961800).

## **CD38 - 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).