

CD38 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2002a**Specification****CD38 Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	P28907
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	34.3kDa KDa

Description

CD38 is a novel multifunctional ectoenzyme widely expressed in cells and tissues especially in leukocytes. CD38 also functions in cell adhesion, signal transduction and calcium signaling.

Immunogen

Purified recombinant fragment of human CD38 (AA: Extra(43-300)) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide.

CD38 Antibody - 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

Dilution

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD38 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD38 Antibody - Protein Information

Name CD38

Function

Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed: [7961800](http://www.uniprot.org/citations/7961800)), PubMed: [8253715](http://www.uniprot.org/citations/8253715)). Synthesizes the $\text{Ca}(2+)$ 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](http://www.uniprot.org/citations/16690024)). Has cADPR hydrolase activity (PubMed: [7961800](http://www.uniprot.org/citations/7961800)), PubMed: [8253715](http://www.uniprot.org/citations/8253715)).

Cellular Location

Cell surface. Membrane; Single-pass type II membrane protein

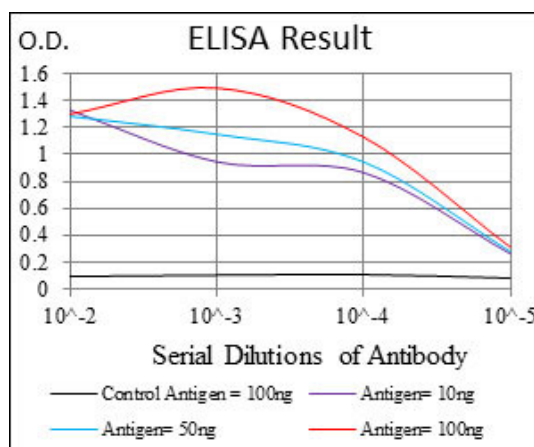
Tissue Location

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

CD38 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



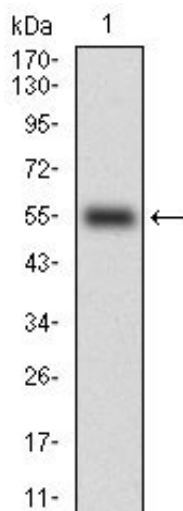


Figure 1: Western blot analysis using CD38 mAb against human CD38 (AA: Extra(43-300)) recombinant protein. (Expected MW is 56.1 kDa)

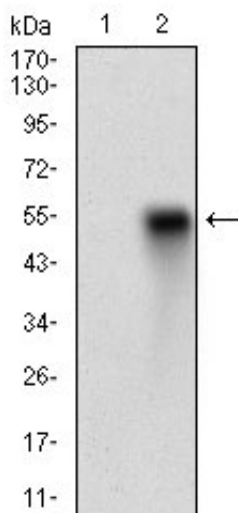


Figure 2: Western blot analysis using CD38 mAb against HEK293 (1) and CD38 (AA: Extra(43-300))-hlgGfc transfected HEK293 (2) cell lysate.

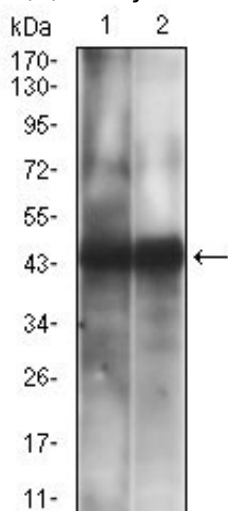


Figure 3: Western blot analysis using CD38 mouse mAb against HEK293 (1), LNCap (2) cell lysate.

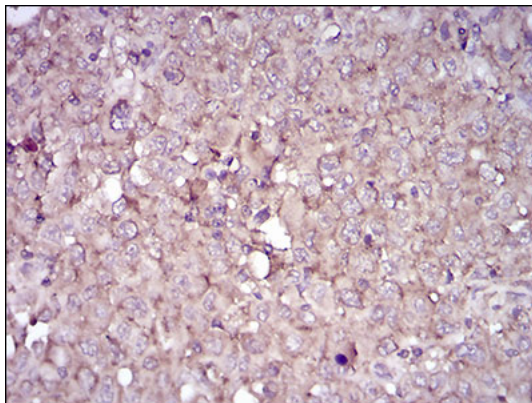


Figure 4: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using CD38 mouse mAb with DAB staining.

CD38 Antibody - References

1. Biochem Biophys Res Commun. 2013 Dec 6;442(1-2):51-5.2. Mol Biol (Mosk). 2012 Sep-Oct;46(5):786-91.