

**CD38 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2002a**

**Specification**

**CD38 Antibody - Product Information**

Application	<b>E, WB, IHC</b>
Primary Accession	<a href="#">P28907</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>34.3kDa KDa</b>

**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**

E~~1/10000  
WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000

**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 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

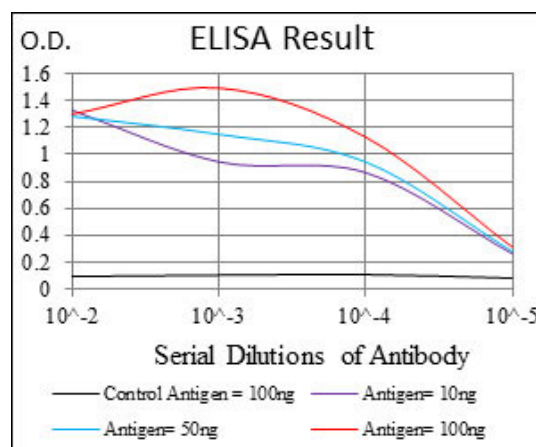
### Tissue Location

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](#)



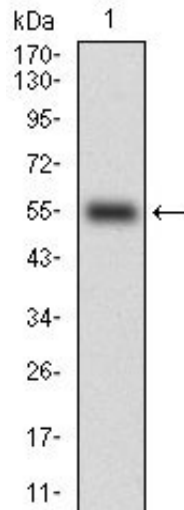


Figure 1: Western blot analysis using CD38 mAb against human CD38 (AA: Extra(43-300)) recombinant protein. (Expected MW is 56.1 kDa)

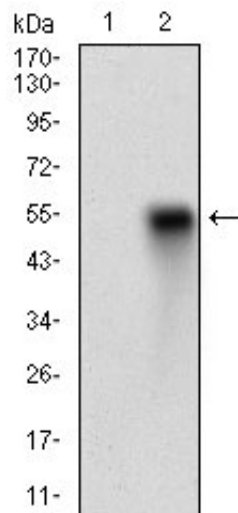


Figure 2: Western blot analysis using CD38 mAb against HEK293 (1) and CD38 (AA: Extra(43-300))-hlgGfc transfected HEK293 (2) cell lysate.

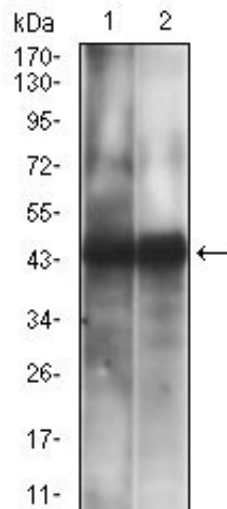


Figure 3: Western blot analysis using CD38 mouse mAb against HEK293 (1), LNCap (2) cell lysate.

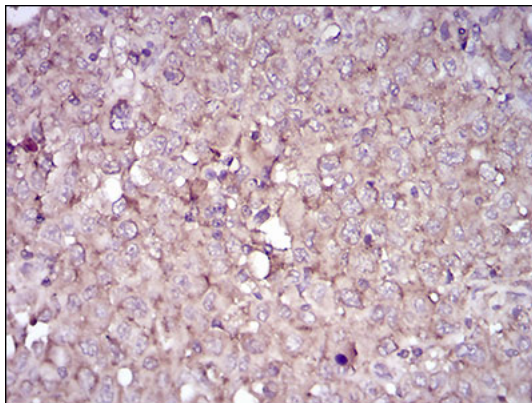


Figure 4: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using CD38 mouse mAb with DAB staining.

### 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.