

# Anti-CD38 Rabbit Monoclonal Antibody

Catalog # ABO13429

#### Specification

## Anti-CD38 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>P28907</u>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	
Anti-CD38 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with	
Human.	

# Anti-CD38 Rabbit Monoclonal Antibody - 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

Calculated MW 34328 MW KDa

Application Details WB 1:500-1:2000<br>HC 1:100-1:500

Subcellular Localization Membrane; Single-pass type II membrane protein.

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

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CD38

**Purification** Affinity-chromatography



Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

# Anti-CD38 Rabbit Monoclonal Antibody - Protein Information

Name CD38

#### Function

Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed:<a href="http://www.uniprot.org/citations/7961800" target="\_blank">7961800</a>, PubMed:<a href="http://www.uniprot.org/citations/8253715" target="\_blank">8253715</a>). 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:<a href="http://www.uniprot.org/citations/16690024" target="\_blank">16690024</a>). Has cADPR hydrolase activity (PubMed:<a href="http://www.uniprot.org/citations/7961800" target="\_blank">7961800</a>, PubMed:<a href="http://www.uniprot.org/citations/16690024" target="\_blank">16690024</a>). Has cADPR hydrolase activity (PubMed:<a href="http://www.uniprot.org/citations/7961800" target="\_blank">8253715</a>).

#### **Cellular Location**

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

#### **Tissue Location**

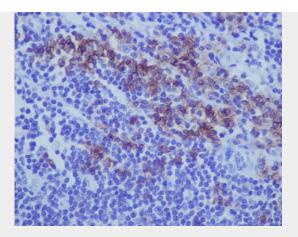
Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.

### Anti-CD38 Rabbit Monoclonal Antibody - Protocols

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

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

Anti-CD38 Rabbit Monoclonal Antibody - Images



Immunohistochemical analysis of paraffin-embedded human tonsil, using CD38 Antibody.

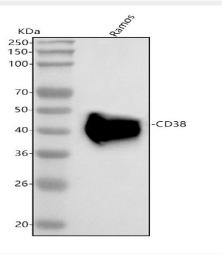


Figure 1. Western blot analysis of CD38 using anti-CD38 antibody (M00193).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Ramos whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD38 antigen affinity purified monoclonal antibody (Catalog # M00193) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD38 at approximately 45 kDa. The expected band size for CD38 is at 34 kDa.