

CD38 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2878b

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P28907
Other Accession	Q5VAN0
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18001
Calculated MW	34328
Antigen Region	241-270

Additional Information

Gene ID	952
Other Names	ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1, 2'-phospho-ADP-ribosyl cyclase, 2'-phospho-ADP-ribosyl cyclase/2'-phospho-cyclic-ADP-ribose transferase, 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 CD38 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 241-270 amino acids from the C-terminal region of human CD38.
Dilution	WB~~1:2000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD38
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Function	Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed: 7961800 , PubMed: 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). Has cADPR hydrolase activity (PubMed: 7961800 , PubMed: 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.

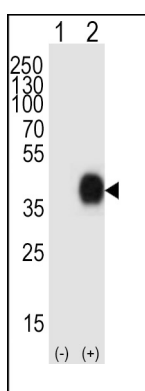
Background

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.

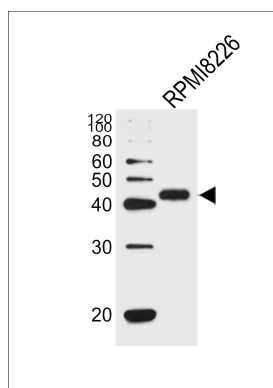
References

Horenstein, A.L., Mol. Med. 15 (3-4), 76-84 (2009) Liu, Q., Biochemistry 47 (52), 13966-13973 (2008) Liu, Q., Chem. Biol. 15 (10), 1068-1078 (2008)

Images

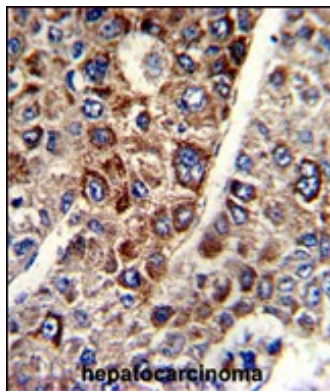


Western blot analysis of lysate from 293T cell line, using CD38 Antibody (C-term)(Cat. #AP2878b). AP2878b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

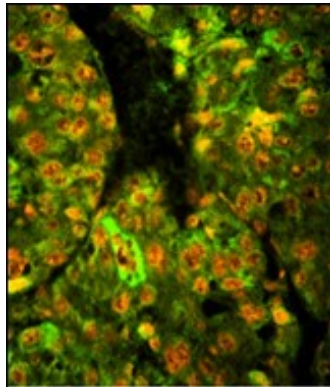


Western blot analysis of lysate from RPMI8226 cell line, using CD38 Antibody (C-term)(Cat. #AP2878b). AP2878b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

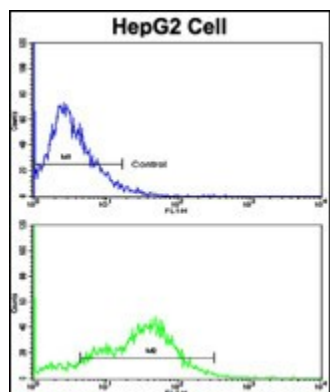
Formalin-fixed and paraffin-embedded human hepatocarcinoma with CD38 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



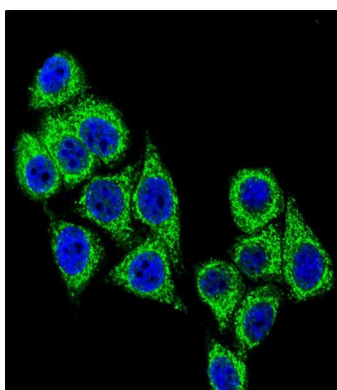
relevance has not been evaluated.



Immunofluorescence analysis of CD38 Antibody (C-term) with paraffin-embedded human hepatocarcinoma tissue . 0.05 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit IgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.

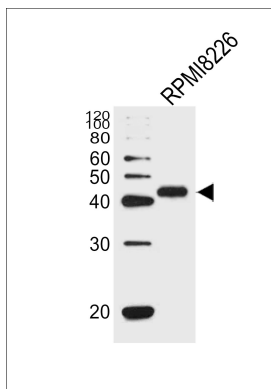


Flow cytometric analysis of HepG2 cells using CD38 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

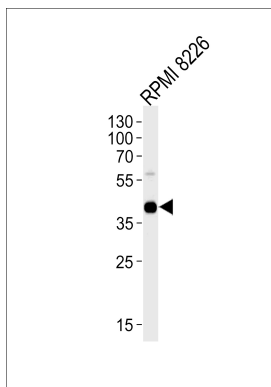


Confocal immunofluorescent analysis of CD38 Antibody (C-term) (Cat. #AP2878b) with Hela cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

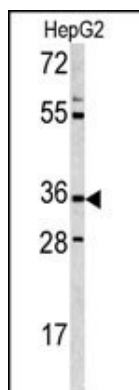
Western blot analysis of lysate from RPMI 8226 cell line, using CD38 Antibody (C-term)(Cat. #AP2878b). AP2878b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



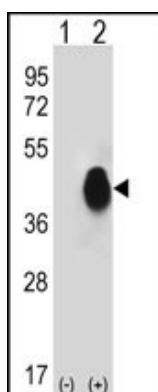
Western blot analysis of lysate from RPMI 8226 cell line, using CD38 Antibody (C-term)(Cat. #AP2878b). AP2878b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



Western blot analysis of CD38 antibody (C-term) (Cat.# AP2878b) in HepG2 cell line lysates (35ug/lane). CD38 (arrow) was detected using the purified Pab.



Western blot analysis of CD38 (arrow) using rabbit polyclonal CD38 Antibody (C-term) (Cat.# AP2878b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CD38 gene.



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