abcam

ab314061

Anti-CD38 antibody [BLR123H] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human CD38 aa 1-300. The exact immunogen used to generate this antibody is proprietary information. Database link P28907
Clone number	BLR123H
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CD38

Function Multifunctional transmembrane glycoprotein able to exert enzymatic activities and also to mobilize calcium, to transduce signals, to adhere to hyaluronan and to other ligands. 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). Functions also as a receptor that binds the ligand CD31 on endothelial cells, promoting lymphocyte activation, proliferation, and migration across the endothelial barrier (PubMed:9551996). Involved in the regulation of crucial dendritic cell functions acquired at the mature stage, such as CCL21-driven migration, survival, and Th1-polarizing activity (PubMed:16293598). In lamina propria T lymphocytes, CD38/CD31 cognate interactions initiate a multistep signaling pathway resulting in activation of LCK anf LAT, followed by cytokine release (PubMed:11259373).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

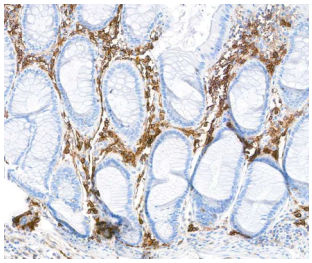
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

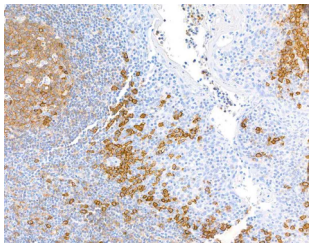
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7 product images



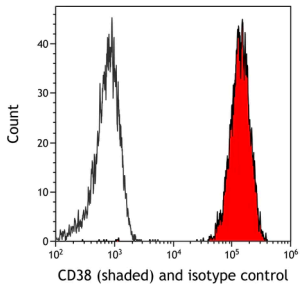
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Detection of human CD38 in FFPE colon carcinoma by immunohistochemistry. Antibody:Rabbit anti-CD38 recombinant monoclonal antibody [BLR123H]. Secondary:HRP-conjugated goat anti-rabbit IgG Substrate:DAB.



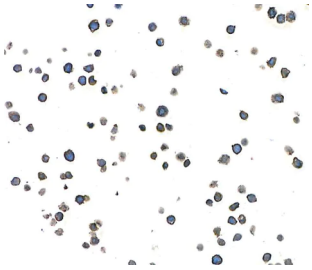
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Detection of human CD38 in FFPE tonsil by immunohistochemistry Antibody:Rabbit anti-CD38 recombinant monoclonal antibody [BLR123H] . Secondary:HRP-conjugated goat anti-rabbit IgG . Substrate:DAB.



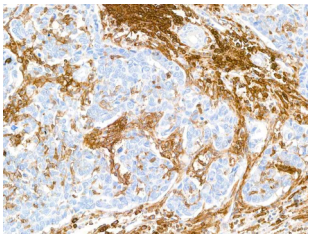
Flow Cytometry - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Detection of human CD38 (shaded) in Ramos cells by flow cytometry. Antibody: Rabbit anti-CD38 recombinant monoclonal [BLR123H] or isotype control (unshaded). Secondary: DyLight® 488-conjugated goat anti-rabbit IgG



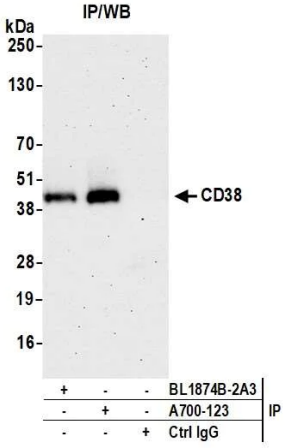
Immunocytochemistry - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Detection of human CD38 in FFPE CCRF-CEM cells by immunocytochemistry. Antibody:Rabbit anti-CD38 recombinant monoclonal antibody [BLR123H]. Secondary:HRP-conjugated goat anti-rabbit IgG . Substrate:DAB.



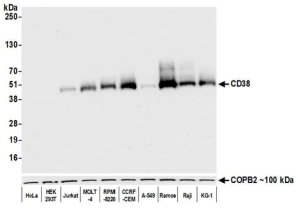
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Detection of human CD38 in FFPE breast carcinoma by immunohistochemistry Antibody:Rabbit anti-CD38 recombinant monoclonal antibody [BLR123H] . Secondary:HRP-conjugated goat anti-rabbit IgG . Substrate:DAB.



Immunoprecipitation - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Samples:Whole cell lysate (1.0 mg per IP reaction; 2% of IP loaded) from Ramos cells prepared using NETN lysis buffer. Antibodies:Rabbit anti-CD38 recombinant monoclonal antibody [BLR123H] (A700-123 lot 1) used for IP at 20 µl/mg lysate. CD38 was also immunoprecipitated by rabbit anti-CD38 antibody BL1874B-2A3. For blotting immunoprecipitated CD38, A700-123 was used at 1:1000. Chemiluminescence with an exposure time of 75 seconds.



Western blot - Anti-CD38 antibody [BLR123H] - BSA free (ab314061)

Samples: Whole cell lysate (10 µg) from HeLa, HEK293T, Jurkat, MOLT-4, RPMI-8226, CCRF-CEM, A-549, Ramos, Raji, and KG-1 cells prepared using NETN lysis buffer. Antibody: Rabbit anti-CD38 recombinant monoclonal antibody [BLR123H] used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Chemiluminescence with an exposure time of 10 seconds. Lower Panel: Rabbit anti-COPB2 antibody
All lanes:
Western blot - Anti-CD38 antibody [BLR123H] - BSA free (ab314061) at 1/1000 dilution

Lane 1:
HeLa Whole cell lysate at 10 µg

Lane 2:
HEK293T Whole cell lysate at 10 µg

Lane 3:
Jurkat Whole cell lysate at 10 µg

Lane 4:
MOLT-4 Whole cell lysate at 10 µg

Lane 5:
RPMI-8226 Whole cell lysate at 10 µg

Lane 6:
CCRF-CEM Whole cell lysate at 10 µg

Lane 7:
A-549 Whole cell lysate at 10 µg

Lane 8:
Ramos Whole cell lysate at 10 µg

Lane 9:
Raji Whole cell lysate at 10 µg

Lane 10:
KG-1 Whole cell lysate at 10 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.