

Product datasheet

Anti-CD38 antibody [EPR21079] - BSA and Azide free ab230153

KO VALIDATED

Recombinant

RabMAb

[1 References](#) [8 Images](#)

Overview

Product name	Anti-CD38 antibody [EPR21079] - BSA and Azide free
Description	Rabbit monoclonal [EPR21079] to CD38 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Mouse spleen tissue.
General notes	<p>ab230153 is the carrier-free version of ab216343.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21079
Isotype	IgG

Applications

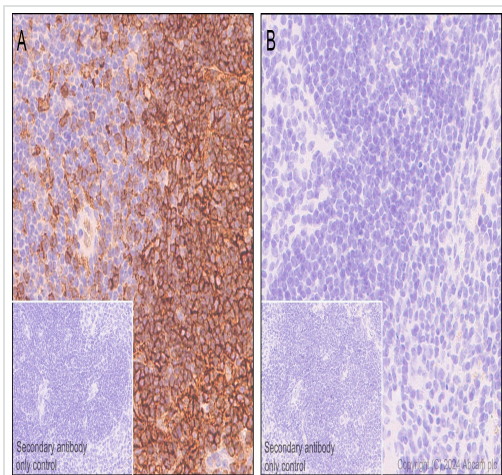
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab230153 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 42 kDa (predicted molecular weight: 34 kDa).

Target

Function	Synthesizes cyclic ADP-ribose, a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system.
Tissue specificity	Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.
Sequence similarities	Belongs to the ADP-ribosyl cyclase family.
Developmental stage	Preferentially expressed at both early and late stages of the B and T-cell maturation. It is also detected on erythroid and myeloid progenitors in bone marrow, where the level of surface expression was shown to decrease during differentiation of blast-forming unit E to colony-forming unit E.
Cellular localization	Membrane.
Form	There are 2 isoforms produced by alternative splicing.

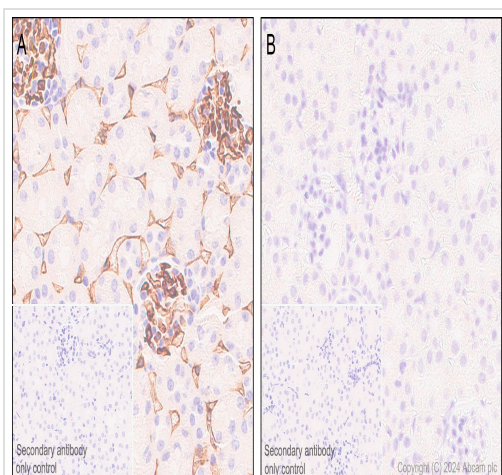
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

This data was developed using [ab216343](#), the same antibody clone in a different buffer formulation.

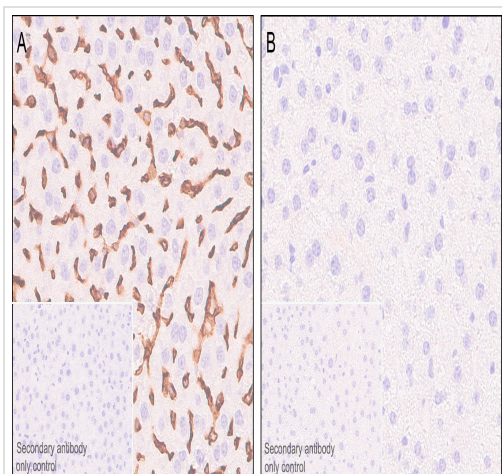
Immunohistochemical analysis of paraffin-embedded (A) Spleen tissue from wild-type C57BL/6JGpt mice (B) Spleen tissue from CD38 knockout mice staining with [ab216343](#) at 1/2000 dilution and ready-to-use Goat Anti-Rabbit IgG H&L (HRP) secondary. Counterstaining with hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. Positive staining on (A) Spleen tissue from wild-type C57BL/6JGpt mice and no staining on (B) Spleen tissue from CD38 knockout mice. The section was incubated with [ab216343](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND™ RX instrument. The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Cd38-KO homozygous mice (Strain ID: T011481).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

This data was developed using [ab216343](#), the same antibody clone in a different buffer formulation.

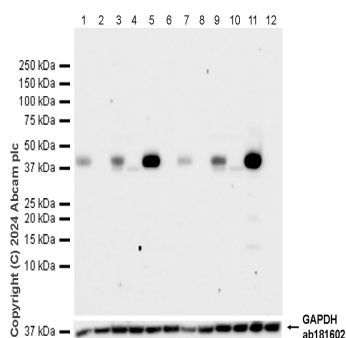
Immunohistochemical analysis of paraffin-embedded (A) Kidney tissue from wild-type C57BL/6JGpt mice (B) Kidney tissue from CD38 knockout mice staining with [ab216343](#) at 1/2000 dilution and ready-to-use Goat Anti-Rabbit IgG H&L (HRP) secondary. Counterstaining with hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. Positive staining on (A) Kidney tissue from wild-type C57BL/6JGpt mice and no staining on (B) Kidney tissue from CD38 knockout mice. The section was incubated with [ab216343](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND™ RX instrument. The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Cd38-KO homozygous mice (Strain ID: T011481).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

This data was developed using **ab216343**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded (A) Liver tissue from wild-type C57BL/6JGpt mice (B) Liver tissue from CD38 knockout mice staining with **ab216343** at 1/2000 dilution and ready-to-use Goat Anti-Rabbit IgG H&L (HRP) secondary. Counterstaining with hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. Positive staining on (A) Liver tissue from wild-type C57BL/6JGpt mice and no staining on (B) Liver tissue from CD38 knockout mice. The section was incubated with **ab216343** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND™ RX instrument. The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Cd38-KO homozygous mice (Strain ID: T011481).



Western blot - Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

All lanes : Anti-CD38 antibody [EPR21079] (**ab216343**) at 1/1000 dilution

- Lane 1 :** Wild-type mouse kidney tissue lysate (male)
- Lane 2 :** CD38 knockout mouse kidney tissue lysate (male)
- Lane 3 :** Wild-type mouse liver tissue lysate (male)
- Lane 4 :** CD38 knockout mouse liver tissue lysate (male)
- Lane 5 :** Wild-type mouse spleen tissue lysate (male)
- Lane 6 :** CD38 knockout spleen tissue lysate (male)
- Lane 7 :** Wild-type mouse kidney tissue lysate (female)
- Lane 8 :** CD38 knockout mouse kidney tissue lysate (female)
- Lane 9 :** Wild-type mouse liver tissue lysate (female)
- Lane 10 :** CD38 knockout mouse liver tissue lysate (female)
- Lane 11 :** Wild-type mouse spleen tissue lysate (female)
- Lane 12 :** CD38 knockout mouse spleen tissue lysate (female)

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

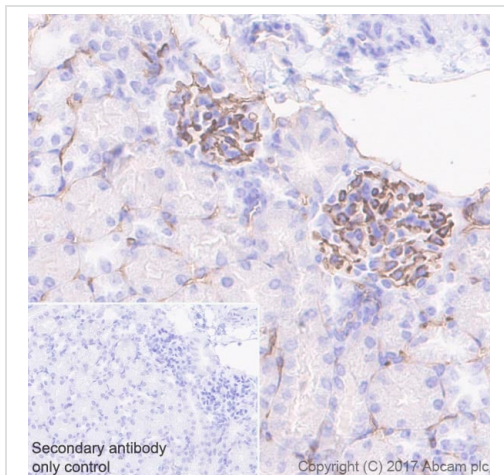
Predicted band size: 34 kDa

Observed band size: 42 kDa

Exposure time: 38 seconds

This data was developed using [ab216343](#), the same antibody clone in a different buffer formulation.

The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and CD38-KO homozygous mice (Strain ID: T011481).



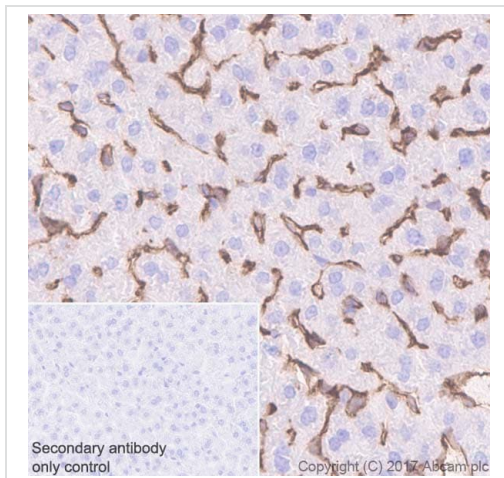
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling CD38 with [ab216343](#) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in endothelial cells of mouse kidney (PMID: 25078456). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab216343](#)).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



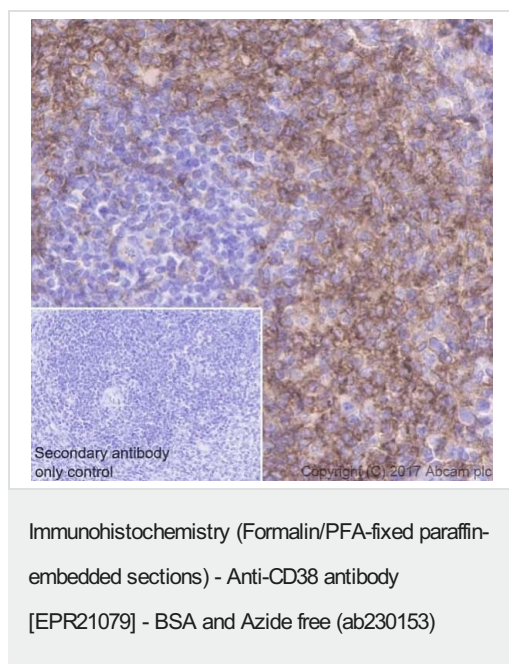
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling CD38 with [ab216343](#) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in the sinusoids of mouse liver (PMID: 17200192). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab216343](#)).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling CD38 with **ab216343** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on mouse spleen (PMID: 10360965). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216343**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-CD38 antibody [EPR21079] - BSA and Azide free (ab230153)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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