abcam

ab314053

Anti-CD79A antibody [BLR234K] - 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	Synthetic Peptide within Human CD79A aa 150-250. The exact immunogen used to generate this antibody is proprietary information. Database link P11912
Clone number	BLR234K
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

ICC

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Target data

See full target information CD79A

Function	Required in cooperation with CD79B for initiation of the signal transduction cascade activated by binding of antigen to the B-cell antigen receptor complex (BCR) which leads to internalization of the complex, trafficking to late endosomes and antigen presentation. Also required for BCR surface expression and for efficient differentiation of pro- and pre-B-cells. Stimulates SYK autophosphorylation and activation. Binds to BLNK, bringing BLNK into proximity with SYK and allowing SYK to phosphorylate BLNK. Also interacts with and increases activity of some Src-family tyrosine kinases. Represses BCR signaling during development of immature B-cells.

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD79a also known as Ig-alpha or MB-1 is a component of the B cell antigen receptor (BCR) complex. It is a transmembrane protein with a molecular mass of approximately 47 kDa. CD79a is part of a heterodimer with CD79b and is mainly expressed on the surface of B lymphocytes. This protein plays a critical mechanical role in signaling transduction through the BCR by associating with membrane-bound immunoglobulin molecules helping to initiate the immune response upon antigen binding.

Biological function summary	This protein acts as an essential mediator in the immune system. CD79a together with CD79b forms part of the BCR complex critical for B cell development and maturation. The BCR complex activates signaling cascades that influence B cell fate decisions such as proliferation differentiation and apoptosis. By transmitting signals from the BCR CD79a helps regulate these cellular functions necessary for efficient immune defense.
Pathways	CD79a plays a pivotal role in the B cell receptor signaling pathway. This pathway involves signaling molecules such as spleen tyrosine kinase (SYK) and phosphoinositide 3-kinase (PI3K) which are activated upon BCR engagement. CD79a acts in concert with other proteins including CD79b and the IgM receptor facilitating downstream signaling cascades that ensure proper B cell responses. Its role is important for linking extracellular antigen recognition to intracellular signaling events.
Associated diseases and disorders	CD79a is significant in conditions like B cell lymphomas and certain immunodeficiencies. Abnormal expression or mutations in CD79a are associated with some types of non-Hodgkin lymphoma. The protein's interaction with CD79b is particularly relevant as alterations in these proteins' function or expression can impact B cell development and lead to pathogenesis in lymphoproliferative disorders. Consequently CD79a serves as an important biomarker and potential therapeutic target in these diseases.

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

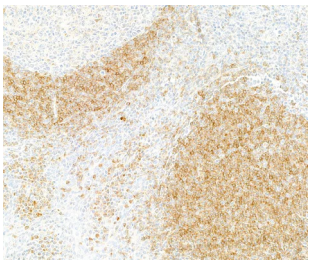
We do not recommend this combination. It is not covered by our product promise.

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.

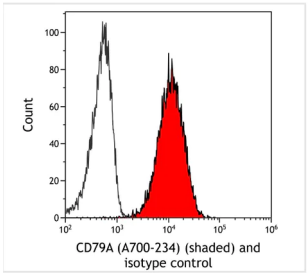
Full details and terms and conditions can be found here:
Terms & Conditions.

9 product images



Immunohistochemistry - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Detection of human CD79A by immunohistochemistry Sample: FFPE section of human tonsil. Antibody: Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] (A700-234-1). Secondary: HRP-conjugated goat antirabbit IgG (A120-501P).



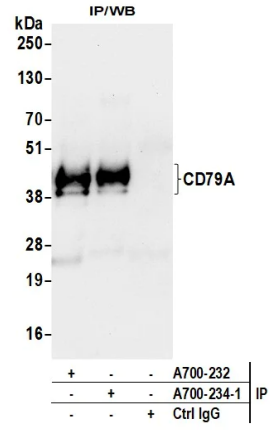
Flow Cytometry - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Detection of human CD79A (shaded) in Daudi cells by flow cytometry.Antibody:Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] or isotype control (unshaded). Secondary: DyLight® 650-conjugated goat anti-rabbit IgG.



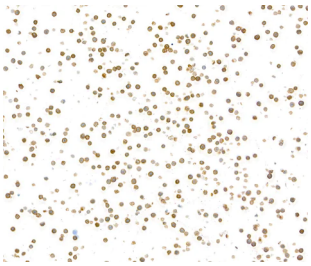
Immunocytochemistry - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Detection of human CD79A by immunocytochemistry. Sample: FFPE section of Daudi cells. Antibody: Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] Secondary: HRP-conjugated goat anti-rabbit IgG .



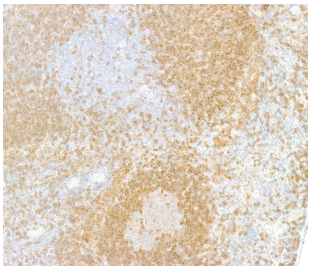
Immunoprecipitation - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Samples:Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from Ramos cells prepared using NETN lysis buffer. Antibodies:Rabbit antiCD79A recombinant monoclonal antibody [BLR234K] (A700-234 lot 1) used for IP at 20 µl/mg lysate. CD79A was also immunoprecipitated by a second antibody against a different epitope of CD79A (A700-232). For blotting immunoprecipitated CD79A, A700-234 was used at 1:1000. Detection:Chemiluminescence with an exposure time of 1 second.



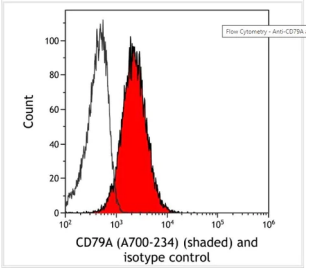
Immunocytochemistry - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Detection of mouse CD79A by immunocytochemistry Sample:FFPE section of WEHI-231 cells. Antibody:Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] (A700-234-1). Secondary: HRP-conjugated goat anti-rabbit IgG (A120-501P).



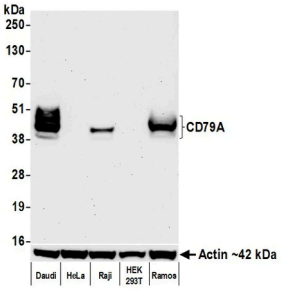
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Sample:FFPE section of mouse spleen. Antibody:Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] (A700-234-1). Secondary:HRP-conjugated goat antirabbit IgG (A120-501P).



Flow Cytometry - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Detection of mouse CD79A (shaded) in A20 cells by flow cytometry.Antibody:Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K]



Western blot - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Samples: Whole cell lysate (50 µg) from Daudi, HeLa, Raji, HEK293T, and Ramos cells prepared using NETN lysis buffer. Antibody:Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] (A700-234 lot 1) used at 1:1000. Secondary:HRP-conjugated goat anti-rabbit IgG (A120-101P). Detection:Chemiluminescence with an exposure time of 30 seconds. Lower Panel: Rabbit antiActin recombinant monoclonal antibody [BLR057F] (A700-057).
All lanes:
Western blot - Anti-CD79A antibody [BLR234K] - BSA free (ab314053) at 1/1000 dilution

Lane 1:
Daudi Whole cell lysate at 50 µg

Lane 2:
Hela Whole cell lysate at 50 µg

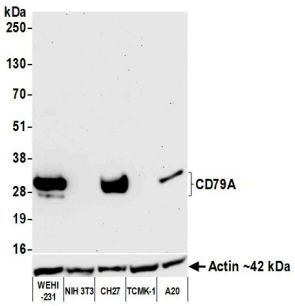
Lane 3:
Raji Whole cell lysate at 50 µg

Lane 4:
HEK- 293T Whole cell lysate at 50 µg

Lane 5:
Ramos Whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG



Western blot - Anti-CD79A antibody [BLR234K] - BSA free (ab314053)

Samples: Whole cell lysate (50 µg) from WEHI-231 (25 µg), NIH 3T3, CH27, TCMK-1, and A20 cells prepared using NETN lysis buffer. Antibody:Rabbit anti-CD79A recombinant monoclonal antibody [BLR234K] (A700-234 lot 1) used at 1:1000. Secondary:HRP-conjugated goat anti-rabbit IgG (A120-101P). Detection:Chemiluminescence with an exposure time of 30 seconds. Lower Panel: Rabbit antiActin recombinant monoclonal antibody [BLR057F] (A700-057).
All lanes:
Western blot - Anti-CD79A antibody [BLR234K] - BSA free (ab314053) at 1/1000 dilution

Lane 1:
WEHI-231 Whole cell lysate at 25 µg

Lane 2:
NIH 3T3 Whole cell lysate at 25 µg

Lane 3:
CH 27 Whole cell lysate at 25 µg

Lane 4:
TCMK-1 Whole cell lysate at 25 µg

Lane 5:
A 20 Whole cell lysate at 25 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'.