abcam

ab16698

Anti-CD79a antibody [SP18]

Anti-CD79a antibody [SP18] (ab16698) is a rabbit monoclonal antibody detecting CD79a in **Flow Cytometry (Intra), IHC-P**. Suitable for **Human**.

- Trusted since 2005

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	SP18
Purification technique	Affinity purification Protein A
Specificity	ab16698 recognises CD79a. We have data to indicate that this antibody may not cross react with Opossum. However, this has not been conclusively tested and expression levels may vary in certain cell lines/tissues. This antibody does not react with mouse species for Flow Cytometry application.
Concentration	0.047 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Predicted

Species	Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Pig, Monkey
Dilution info	-
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Mouse
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Rat
Dilution info	-
Notes	-

Species	Rabbit
Dilution info	-
Notes	-

Species	Horse
Dilution info	-
Notes	-

Species	Chicken
Dilution info	-
Notes	-

Species	Guinea pig
Dilution info	-
Notes	-

Species	Cow
Dilution info	-
Notes	-

Species	Dog
Dilution info	-
Notes	-

Species	Pig
Dilution info	-
Notes	-

Species	Monkey
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	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-CD79a antibody [SP18] (ab16698) is a rabbit monoclonal antibody and is validated for use in Flow Cytometry (Intra), Immunohistochemistry (IHC-P) in Human samples.

Collaboration
Anti-CD79a [SP18] (ab16698) is a clone from the portfolio of Spring Bioscience (Roche) SP clones which have been optimised for immunohistochemistry (IHC).

Other related products
We have a range of other formats of antibody clone [SP18] also available for your convenience: ab16698, ab238811, ab288411

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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

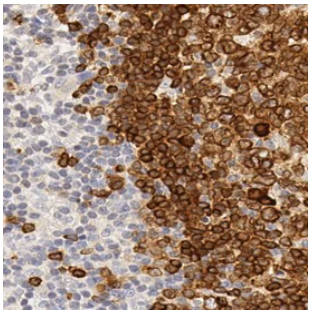
We do not recommend this combination. It is not covered by our product promise.

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.

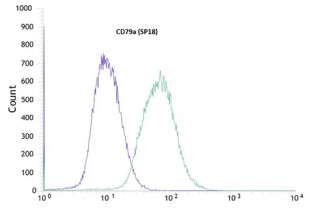
2 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD79a antibody [SP18] (ab16698)

CD79a Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CD79a antibody

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling CD79a with ab16698 at 1/400 dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).



Flow Cytometry (Intracellular) - Anti-CD79a antibody [SP18] (ab16698)

CD79a Flow Cytometry (Intracellular) staining using rabbit Anti-CD79a antibody

Flow cytometric analysis of rabbit anti-CD79a (SP18) antibody ab16698 (1/100) in Jurkat cells (green) compared to negative control of rabbit IgG (blue).

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