abcam

ab97426

Anti-SIGLEC5 antibody [1A5]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	1A5
Purification technique	Affinity purification Protein A/G
Specificity	This antibody cross reacts with SEGLEC14.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information SIGLEC5

Function	Putative adhesion molecule that mediates sialic-acid dependent binding to cells. Binds equally to alpha-2,3-linked and alpha-2,6-linked sialic acid. The sialic acid recognition site may be masked by cis interactions with sialic acids on the same cell surface.

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

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

Activity summary	SIGLEC5 also known as CD170 is a sialic acid-binding Ig-like lectin with a molecular mass of approximately 96 kDa. This protein plays an important role in immune cell signaling by recognizing sialylated glycans on the surface of cells. SIGLEC5 is mainly expressed on immune cells such as neutrophils monocytes and macrophages. It belongs to the lectin family of proteins and can modulate immune responses and communication between cells.
Biological function summary	SIGLEC5 functions by mediating cell-cell interactions and transmitting inhibitory signals that regulate immune responses. It binds to sialic acid-containing glycoproteins which can help modulate the threshold for cell activation by transmitting signals through its immunoreceptor tyrosine-based inhibitory motif (ITIM). SIGLEC5 is not part of a large complex but interacts with other molecules to exert its function in maintaining immune cell balance.
Pathways	SIGLEC5 plays a role in immune signaling pathways by maintaining cell homeostasis. It contributes to the regulation of the immune response by modulating inhibitory signaling pathways. It is associated with proteins like Src family kinases which phosphorylate the ITIM motif to initiate downstream signaling cascades. Additionally its interaction with sialic acids allows modulation of the innate immune response to various stimuli.

Associated diseases and disorders	SIGLEC5 has been linked to autoimmune diseases and infections like bacterial sepsis. In autoimmune conditions the dysregulation of SIGLEC5-associated pathways can lead to improper immune cell activation and tissue damage. In the context of bacterial sepsis SIGLEC5 assists in dampening excessive immune responses and limiting inflammation. SIGLEC5 connects with proteins like DAP12 where aberrations could also influence disease progressions making it a target of interest for potential therapeutic interventions.

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

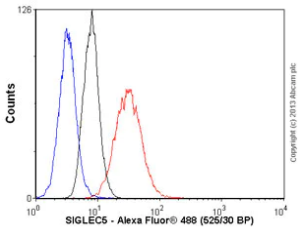
We do not recommend this combination. It is not covered by our product promise.

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1 product image



Flow Cytometry - Anti-SIGLEC5 antibody [1A5] (ab97426)

SIGLEC5 Flow Cytometry staining using mouse Anti-SIGLEC5 antibody

Overlay histogram showing THP1 cells stained with ab97426 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab97426, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. Please note that

Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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