abcam

ab106174

Anti-SIGLEC H antibody [440c]

Key facts

Isotype	IgG2b
Host species	Rat
Storage buffer	Constituents: PBS, 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	440c
Purification technique	Affinity purification Protein G
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	ab106174 was 0.2 µm filtered prior to formulation.

Reactivity data

Flow Cyt

Expected

Species	Mouse
Dilution info	-
Notes	ab18536 - Rat monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

FuncS (Neut/Block)

Expected

Species	Mouse
Dilution info	-
Notes	For inhibition of IFN-alpha secretion dilutions have to be made according to the amounts of SIGLEC H to be inactivated.

IHC-Fr

Expected

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

Target data

See full target information SIGLEC H

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

Notes

Incubation of interferon producing cells with antibody 440c in vitro or administration of antibody 440c in vivo reduces secretion of IFN-alpha in response to CpG DNA without causing interferon producing cells depletion.

Supplementary info

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

Activity summary	SIGLEC H also known as sialic acid-binding Ig-like lectin H weighs about 50 kDa. It is found on the surface of plasmacytoid dendritic cells (pDCs) and it is closely related to the immune system. This protein lacks a signaling domain but it can pair with other proteins to transmit signals across cell membranes. The expression of SIGLEC H is highly specific to pDCs making it a useful marker for these cells in various immunological studies.
Biological function summary	This protein plays an important role in the immune response. SIGLEC H functions in the recognition and uptake of pathogens through endocytosis by binding sialylated glycoproteins. Unlike some other members of the SIGLEC family it is not part of a complex and relies on interactions with other signaling molecules. These interactions facilitate phagocytosis and antigen presentation which are critical functions of pDCs in adaptive immunity.
Pathways	SIGLEC H becomes involved in the innate immune signaling pathways that regulate type I interferon production. The pathways include the Toll-like receptor (TLR) signaling pathway. SIGLEC H modulates TLR7 and TLR9 pathways in pDCs which manage the production of cytokines and chemokines. It can also influence the expression of interferon regulatory factors further impacting cytokine production and modulating immune response.
Associated diseases and disorders	The improper function or regulation of SIGLEC H affects autoimmune diseases like systemic lupus erythematosus. Anomalies in SIGLEC H might also have implications for viral infections due to its role in pathogen detection and immune responses. Proteins such as TLR7 and interferon regulatory factor 7 (IRF7) show connections with SIGLEC H within these contexts often determining the outcome of immune-mediated and infectious 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.

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