

AM26317FC-N**Monoclonal Antibody to Siglec-H - FITC**

Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	Siglec H is unique among Sialic acid-binding Ig-like lectins (Siglecs) proteins because it associates with the adaptor protein DAP12. DAP12 recognize certain viruses and CpG-DNA through TLR9, resulting in secretion of IFN-alpha, IL-12 and proinflammatory chemokines. Together these cytokines and chemokines recruit and activate NK cells and T cells as well as modulating the antigen presenting function of dendritic cells (DC). IPC themselves also function as antigen presenting cells that expand memory T cells and induce Th1 differentiation. Therefore IPC may provide a first line of host defense against viral infections by activating both innate and adaptive responses in vivo.
Uniprot ID:	Q3Y597
NCBI:	10090
Host / Isotype:	Rat / IgG2b
Clone:	440c
Format:	State: Liquid 0.2 µm filtered Ig fraction Purification: Protein G Buffer System: PBS Preservatives: 0.02% sodium azide Stabilizers: 1% bovine serum albumin Label: FITC
Applications:	Immunohistochemistry on frozen sections: The typical starting working dilution is 1:50. Flow cytometry: The typical starting working dilution is 1:50. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The monoclonal antibody 440c reacts with Siglec-H, a cell-surface receptor molecule selectively expressed on murine natural interferon producing cells (IPC), also called mouse plasmacytoid dendritic cells (pDC). It exclusively recognizes mouse Siglec-H in all lymphoid organs under both normal and inflammatory conditions. Siglec-H is normally present in the T cell zone of lymph nodes and spleen. Incubation of IPC with antibody 440c in vitro or administration of antibody 440c in vivo reduces secretion of IFN-alpha in response to CpG DNA without causing IPC depletion.
Species Reactivity:	Tested: Mouse
Storage:	Store at 2 - 8 °C. Shelf life: one year from despatch.
General Readings:	1. Blasius AL, Cella M, Maldonado J, Takai T, Colonna M. Siglec-H is an IPC-specific receptor that modulates type I IFN secretion through DAP12. Blood. 2006 Mar 15;107(6):2474-6. Epub 2005 Nov 17. PubMed PMID: 16293595.

2. Blasius A, Vermi W, Krug A, Facchetti F, Cella M, Colonna M. A cell-surface molecule selectively expressed on murine natural interferon-producing cells that blocks secretion of interferon-alpha. *Blood*. 2004 Jun 1;103(11):4201-6. Epub 2003 Dec 24. PubMed PMID: 14695235.
3. Colonna, M et al; Plasmacytoid dendritic cells in immunity. *Nat Immunol* 2004, 5: 1219.
4. Seth S, Oberdörfer L, Hyde R, Hoff K, Thies V, Worbs T, et al. CCR7 essentially contributes to the homing of plasmacytoid dendritic cells to lymph nodes under steady-state as well as inflammatory conditions. *J Immunol*. 2011 Mar 15;186(6):3364-72. doi: 10.4049/jimmunol.1002598. Epub 2011 Feb 4. PubMed PMID: 21296980.