

CD170 (Siglec F) Monoclonal Antibody (1RNM44N), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	1RNM44N
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2688082

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.125 µg/test	6 Publications

Product Specific Information

Description: This 1RNM44N monoclonal antibody recognizes mouse CD170, also known as Siglec F. Siglec F is a cell surface lectin belonging to the Ig superfamily that binds glycoconjugates containing sialic acids that are commonly found on various cell types. The cytoplasmic domain of Siglec F contains an immunoreceptor tyrosine-based inhibitory motif (ITIM) that initiates intracellular signaling upon ligand binding. Siglec F is expressed mostly on eosinophils and alveolar macrophages and lower levels of this receptor have also been reported on immature myelomonocytic cells. mouse Siglec F is a functional ortholog of human Siglec 8, however, unlike human Siglec 8, mouse Siglec F is not expressed on mast cells.

This 1RNM44N antibody will recognize a formaldehyde-fixed epitope.

Applications Reported: This 1RNM44N antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 1RNM44N antibody has been tested by flow cytometric analysis of thioglycolate-elicited peritoneal macrophages. This may be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

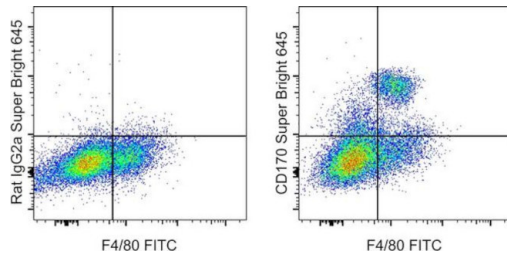
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD170 (Siglec F) Monoclonal Antibody (1RNM44N), Super Bright™ 645, eBioscience™



CD170 (Siglec F) Antibody (64-1702-82) in Flow

BALB/c mouse thioglycolate-elicited peritoneal exudate cells were stained with F4/80 Monoclonal Antibody, FITC (Product # 11-4801-82) and 0.06 μ g of Rat IgG2a K Isotype Control Super Bright 645 (Product # 64-4321-82) (left) or 0.06 μ g of Anti-Mouse CD170 (Siglec F) Super Bright 645 (right). Viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

Immunohistochemistry (2)

Molecular neurodegeneration

Amyloid-beta and tau pathologies act synergistically to induce novel disease stage-specific microglia subtypes.

"Published figure using CD170 (Siglec F) monoclonal antibody (Product # 64-1702-82) in Immunohistochemistry"

Authors: Kim DW, Tu KJ, Wei A, Lau AJ, Gonzalez-Gil A, Cao T, Braunstein K, Ling JP, Troncoso JC, Wong PC, Blackshaw S, Schnaar RL, Li T

Year
2022

MedComm

Single-cell transcriptomics reveals distinct cell response between acute and chronic pulmonary infection of *Pseudomonas aeruginosa*.

"Published figure using CD170 (Siglec F) monoclonal antibody (Product # 64-1702-82) in Immunohistochemistry"

Authors: Hu X, Wu M, Ma T, Zhang Y, Zou C, Wang R, Zhang Y, Ren Y, Li Q, Liu H, Li H, Wang T, Sun X, Yang Y, Tang M, Li X, Li J, Gao X, Li T, Zhou X

Year
2022

Flow Cytometry (6)

Advanced science (Weinheim, Baden-Wurttemberg, Germany)

Group 2 Innate Lymphoid Cells Protect Mice from Abdominal Aortic Aneurysm Formation via IL5 and Eosinophils.

"Published figure using CD170 (Siglec F) monoclonal antibody (Product # 64-1702-82) in Flow Cytometry"

Authors: Zhang Y, Liu T, Deng Z, Fang W, Zhang X, Zhang S, Wang M, Luo S, Meng Z, Liu J, Sukhova GK, Li D, McKenzie ANJ, Libby P, Shi GP, Guo J

Year
2023

Nature

Cells of the human intestinal tract mapped across space and time.

"Published figure using CD170 (Siglec F) monoclonal antibody (Product # 64-1702-82) in Flow Cytometry"

Authors: Elmentaite R, Kumasaka N, Roberts K, Fleming A, Dann E, King HW, Kleshchevnikov V, Dabrowska M, Pritchard S, Bolt L, Vieira SF, Mamanova L, Huang N, Perrone F, Goh Kai'En I, Liso SN, Katan M, Leonard S, Oliver TRW, Hook CE, Nayak K, Campos LS, Domínguez Conde C, Stephenson E, Engelbert J, Botting RA, Polanski K, van Dongen S, Patel M, Morgan MD, Marioni JC, Bayraktar OA, Meyer KB, He X, Barker RA, Uhlig HH, Mahbubani KT, Saeb-Parsy K, Zilbauer M, Clatworthy MR, Haniffa M, James KR, Teichmann SA

Year
2021

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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