

CD223 (LAG-3) Monoclonal Antibody (3DS223H), Super Bright™ 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	3DS223H
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 nm
Immunogen	hCD223-FC PFA 4%
Form	Liquid
Concentration	5 µL/Test
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_2802471

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	5 Publications

Product Specific Information

Description: This 3DS223H monoclonal antibody recognizes human CD223 also known as Lymphocyte Activation Gene 3 (LAG-3). LAG-3 is a 70-kDa surface glycoprotein belonging to the Ig superfamily with homology to CD4. LAG-3 binds to MHC class II with higher affinity than CD4 and is thought to be involved in the negative regulation of T cell activation and homeostatic proliferation. Surface expression of LAG-3 has been reported on activated T cells (including regulatory T cells) and NK cells. CD8+ T cells usually express LAG-3 at significantly higher levels than CD4+ T cells. Coexpression of LAG-3 and CD49b has been proposed to identify human and mouse Type 1 regulatory T cells (Tr1 cells).

This 3DS223H antibody will recognize a formaldehyde-fixed epitope.

Applications Reported: This 3DS223H antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 3DS223H antibody has been pre-diluted and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This may be used at 5 µL (0.5 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.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

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-4401-42) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

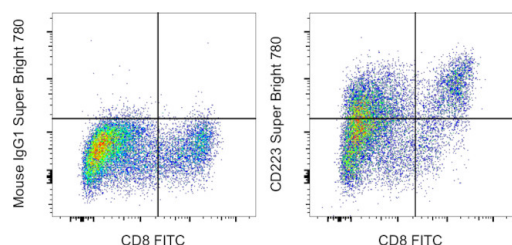
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 780 nm; Laser: Violet Laser

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

Product Images For CD223 (LAG-3) Monoclonal Antibody (3DS223H), Super Bright™ 780, eBioscience™



CD223 (LAG-3) Antibody (78-2239-42) in Flow

Normal human peripheral blood cells were stimulated for 72 hours with CD3 and CD28 Monoclonal Antibodies, Functional Grade (Product # 16-0037-85 and Product # 16-0289-85) and then stained with CD8 Monoclonal Antibody, FITC (Product # 11-0087-42) and Mouse IgG1 kappa Isotype Control, Super Bright 780 (Product # 78-4714-82) (left) or CD223 (LAG-3) Monoclonal Antibody, Super Bright 780 (right). Viable cells, as determined by 7AAD (Product # 00-6993-50), were used for analysis.

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Flow Cytometry (5)

Frontiers in oncology

Low-density lipoprotein balances T cell metabolism and enhances response to anti-PD-1 blockade in a HCT116 spheroid model.

"Published figure using CD223 (LAG-3) monoclonal antibody (Product # 78-2239-42) in Flow Cytometry"

Authors: Babl N,Hofbauer J,Matos C,Voll F,Menevse AN,Rechenmacher M,Mair R,Beckhove P,Herr W,Siska PJ, Renner K,Kreutz M,Schnell A

Year
2023

Frontiers in immunology

Bispecific T-Cell Engaging Antibodies Against MUC16 Demonstrate Efficacy Against Ovarian Cancer in Monotherapy and in Combination With PD-1 and VEGF Inhibition.

"Published figure using CD223 (LAG-3) monoclonal antibody (Product # 78-2239-42) in Flow Cytometry"

Authors: Yeku OO,Rao TD,Laster I,Kononenko A,Purdon TJ,Wang P,Cui Z,Liu H,Brentjens RJ,Spriggs D

Year
2021

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More applications with references on thermofisher.com

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