



# CD223 (LAG-3) Monoclonal Antibody (3DS223H), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	3DS223H
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 nm
Immunogen	hCD223-FC PFA 4%
Form	Liquid
Concentration	5 μL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573732

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 μL (0.06 μg)/test	14 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-titrated and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5  $\mu$ L (0.06  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5.

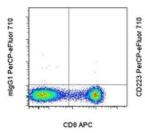
We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

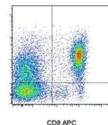
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations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

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

#### Product Images For CD223 (LAG-3) Monoclonal Antibody (3DS223H), PerCP-eFluor™ 710, eBioscience™





#### CD223 (LAG-3) Antibody (46-2239-42) in Flow

Normal human peripheral blood cells were stimulated for 3 days with Human IL-2 Recombinant Protein (Product # 14-8029-81), Anti-Human CD3, and Anti-Human CD28 Functional Grade Purifieds (Product # 16-0037-81 and Product # 16-0289-81). These cells were then surface stained with Anti-Human CD8a APC (Product # 17-0087-42) and Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (Product # 46-4714-82) (left) or Anti-Human CD223 (LAG-3) PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

#### View more figures on thermofisher.cn

#### **□ 14 References**

#### Flow Cytometry (14)

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 # 46-2239-42) 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

#### **Nature**

## RASA2 ablation in T cells boosts antigen sensitivity and long-term function.

"46-2239-42 was used in Flow cytometry/Cell sorting to highlight RASA2 as a promising target to enhance both persistence and effector function in T cell therapies for cancer treatment."

Authors: Carnevale J,Shifrut E,Kale N,Nyberg WA,Blaeschke F,Chen YY,Li Z,Bapat SP,Diolaiti ME,O'Leary P,Vedova S, Belk J,Daniel B,Roth TL,Bachl S,Anido AA,Prinzing B,Ibañez-Vega J,Lange S,Haydar D,Luetke-Eversloh M,Born-Bony M,Hegde B,Kogan S,Feuchtinger T,Okada H,Satpathy AT,Shannon K,Gottschalk S,Eyquem J,Krenciute G,Ashworth A, Marson A

**Year** 2022

Species Human

View more Flow references on thermofisher.cn

#### More applications with references on thermofisher.cn

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