

# CD223 (LAG-3) Monoclonal Antibody (eBioC9B7W (C9B7W)), eFluor™ 450, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioC9B7W (C9B7W)
Conjugate	eFluor™ 450
Excitation/Emission Max	405/445 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11149866

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	8 Publications

## Product Specific Information

**Description:** The eBioC9B7W monoclonal antibody recognizes mouse CD223 (LAG-3, LAG3) protein expressed by activated alpha/beta-TCR bearing T cells, a subset of gamma/delta-TCR bearing T cells and a subset of NK cells. CD223 is a 70 kDa type I transmembrane protein with a structure that is similar to CD4. However, a soluble form of human CD223 has been detected by ELISA in human serum, and data suggest that mouse CD223 is proteolytically cleaved in the D4 domain. This results in a 54 kDa fragment containing all the extracellular domains, and a 16 kDa fragment containing the intracellular and transmembrane domains. The 54 kDa can remain membrane-associated or be released as soluble CD223.

CD223 binds to MHC class II with higher affinity than CD4, and it is thought that this interaction is involved in the negative regulation of T-cell activation and homeostatic proliferation. Furthermore, CD223 is expressed by CD4+CD25+ regulatory T cells, and it has been suggested that CD223 may be involved in their regulatory function.

**Applications Reported:** This C9B7W antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This C9B7W antibody has been tested by flow cytometric analysis of stimulated mouse splenocytes. This can be used at less than or equal to 1 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

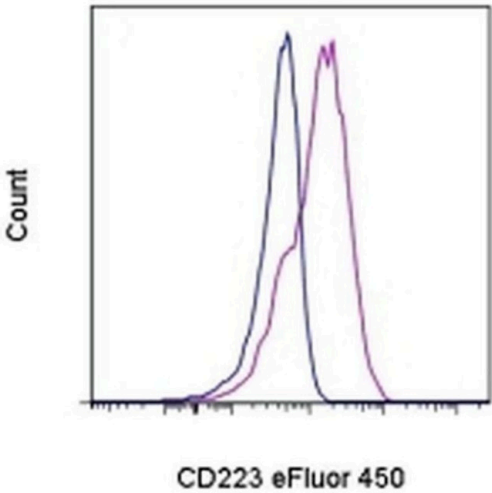
eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm).

Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD223 (LAG-3) Monoclonal Antibody (eBioC9B7W (C9B7W)), eFluor™ 450, eBioscience™



**CD223 (LAG-3) Antibody (48-2231-82) in Flow**  
Staining of 3-day Anti-Mouse CD3 and Anti-Mouse CD28 Functional Grade Purified (Product # 16-0031-82 and Product # 16-0281-82)-stimulated C57Bl/6 splenocytes with 0.5 µg of Rat IgG1 K Isotype Control eFluor® 450 (Product # 48-4301-82) (blue histogram) or 0.5 µg of Anti-Mouse CD223 (Lag-3) eFluor® 450 (purple histogram). Total viable cells, as determined by Fixable Viability Dye eFluor® 450, were used for analysis.

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

8 References

Flow Cytometry (8)

<p>Journal for immunotherapy of cancer</p> <p><b>BRCA1 deficiency in mature CD8<sup>+</sup> T lymphocytes impairs antitumor immunity.</b></p> <p>"Published figure using CD223 (LAG-3) monoclonal antibody (Product # 48-2231-82) in Flow Cytometry"</p> <p>Authors: Wu B, Qi L, Chiang HC, Pan H, Zhang X, Greenbaum A, Stark E, Wang LJ, Chen Y, Haddad BR, Clagett D, Isaacs C, Elledge R, Horvath A, Hu Y, Li R</p>	<p>Year</p> <p>2023</p>
<p>Nature communications</p> <p><b>Breast cancer cell-derived extracellular vesicles promote CD8<sup>+</sup>T cell exhaustion via TGF- type II receptor signaling.</b></p> <p>"Published figure using CD223 (LAG-3) monoclonal antibody (Product # 48-2231-82) in Flow Cytometry"</p> <p>Authors: Xie F, Zhou X, Su P, Li H, Tu Y, Du J, Pan C, Wei X, Zheng M, Jin K, Miao L, Wang C, Meng X, van Dam H, Ten Dijke P, Zhang L, Zhou F</p>	<p>Year</p> <p>2022</p>

View more Flow references on [thermofisher.cn](https://thermofisher.cn)

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