

CD223 (LAG-3) Monoclonal Antibody (eBioC9B7W (C9B7W)), Super Bright™ 600, 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), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioC9B7W (C9B7W)
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 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_2744850

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1.0 µg/test	4 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 eBioC9B7W antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioC9B7W antibody has been tested by flow cytometric analysis of stimulated mouse splenocytes. This may be used at less than or equal to 1.0 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 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend

using a 610/20 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.

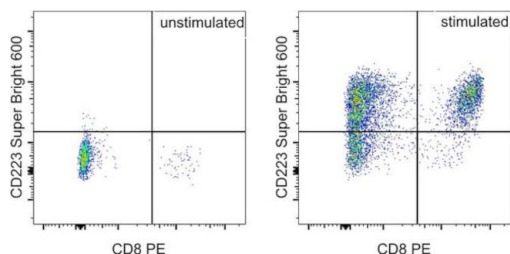
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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: 600 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 (eBioC9B7W (C9B7W)), Super Bright™ 600, eBioscience™



CD223 (LAG-3) Antibody (63-2231-82) in Flow

Swiss Webster mouse splenocytes were unstimulated (left) or stimulated for 72 hours with CD3e and CD28 Monoclonal Antibodies, Functional Grade (Product # 16-0031-85 and Product # 16-0281-85) (right). Cells were then stained with CD8 Monoclonal Antibody, PE (Product # 12-0081-82) and 1.0 μ g of CD223 Monoclonal Antibody, Super Bright 600. Total viable cells were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

4 References

Flow Cytometry (4)

Journal for immunotherapy of cancer

BRCA1 deficiency in mature CD8⁺ T lymphocytes impairs antitumor immunity.

"Published figure using CD223 (LAG-3) monoclonal antibody (Product # 63-2231-82) in Flow Cytometry"

Authors: Wu B, Qi L, Chiang HC, Pan H, Zhang X, Greenbaum A, Stark E, Wang LJ, Chen Y, Haddad BR, Claggett D, Isaacs C, Elledge R, Horvath A, Hu Y, Li R

Year
2023

eLife

Meningeal lymphatic drainage promotes T cell responses against *Toxoplasma gondii* but is dispensable for parasite control in the brain.

"63-2231-82 was used in Flow cytometry/Cell sorting to reveal that CNS lymphatic drainage supports the development of peripheral T cell responses against *T. gondii* but remains dispensable for immune protection of the brain."

Authors: Kovacs MA, Cowan MN, Babcock IW, Sibley LA, Still K, Batista SJ, Labuzan SA, Sethi I, Harris TH

Year
2022

Species
Mouse

Dilution
1:200

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

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.