

# CD278 (ICOS) Monoclonal Antibody (7E.17G9), Super Bright™ 645, eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	7E.17G9
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_2734943

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	3 Publications

## Product Specific Information

**Description:** The 7E.17G9 monoclonal antibody reacts with mouse ICOS (Inducible COStimulatory molecule), a T cell specific molecule and a third member of the CD28/CTLA-4 family. A homodimer of 47-57 kDa, ICOS is expressed on activated T cells, has potent costimulatory activity for T cell activation and proliferation and is required for humoral immune response. ICOS binds to its ligand on activated APC including B cells called B7h/B7RP-1 and is thought to play a protective role in inflammatory autoimmune diseases. ICOS may be involved in the development of Th2 cells.

**Applications Reported:** This 7E.17G9 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 7E.17G9 antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 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 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.

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

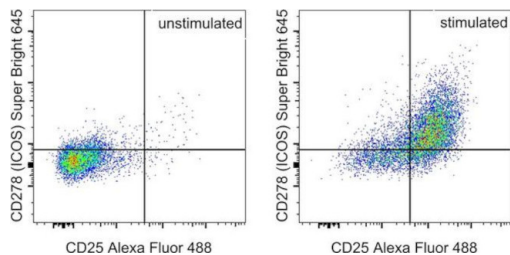
light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ 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 CD278 (ICOS) Monoclonal Antibody (7E.17G9), Super Bright™ 645, eBioscience™



### CD278 (ICOS) Antibody (64-9942-82) in Flow

Mouse splenocytes were unstimulated (left) or stimulated for 72 hours with Con A (Product # 00-4978-93) (right). Cells were then stained with CD25 Monoclonal Antibody, Alexa Fluor 488 (Product # 53-0251-82) and 0.25  $\mu$ g of CD278 Monoclonal Antibody, Super Bright 645. Cells in the lymphocyte gate were used for analysis.

## 3 References

### Flow Cytometry (3)

Advanced science (Weinheim, Baden-Wurtemberg, Germany)

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

"Published figure using CD278 (ICOS) monoclonal antibody (Product # 64-9942-82) 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 communications

#### Control of T<sub>reg</sub> cell homeostasis and immune equilibrium by Lkb1 in dendritic cells.

"Published figure using CD278 (ICOS) monoclonal antibody (Product # 64-9942-82) in Flow Cytometry"

Authors: Chen S,Fang L,Guo W,Zhou Y,Yu G,Li W,Dong K,Liu J,Luo Y,Wang B,Li Z,Zhao C,Sun Z,Shen Y,Leng Q,Zhou D,Han Z,Huang H,Ren H,Xu G,Feng X

Year  
2018

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

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