Gata-3 Monoclonal Antibody (TWAJ), PE-Cyanine7, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Mouse, Pig, Rhesus monkey
Published Species	Human, Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	TWAJ
Conjugate	PE-Cyanine7
Excitation/Emission Max	569/780 nm
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_2573568

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.00375 µg)/test	24 Publications

Product Specific Information

Description: The monoclonal antibody TWAJ recognizes mouse and human Gata-3, a member of the Gata family of transcription factors. Gata-3 is a T cell-specific transcription factor important for thymic development and Th2 differentiation. Expression during embryonic development is found in the central nervous system, skin, mammary glands and kidney. During development, the expression of Gata-3 is essential as homozygous knock-out of Gata-3 is embryonic lethal. The Gata-3 is also essential for T cell commitment and survival. In the thymus, expression is found mainly on the CD4 single positive cells. During Th2 differentiation, Gata-3 binds to the IL-4 promoter as well as represses the expression of T-bet, thus inhibiting Th1 differentiation.

Alternative splice variants have been reported especially in the MCF7 cell line. The TWAJ Human/Mouse Gata-3 antibody will recognize both forms (50 and 45 kDa) of the protein.

Staining with the TWAJ Human/Mouse Gata-3 antibody requires the use of the Foxp3/Transcription Factor Staining Buffer Set. (cat 00-5523)

Crossreactivity in rhesus monkeys has been published.

Applications Reported: This TWAJ antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This TWAJ antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of mouse thymocytes using the Foxp3/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol. Please refer to

Best Protocols: Protocol B: One step protocol for (nuclear) intracellular proteins located under the Resources Tab online. This can be used at 5 µL (0.00375 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 10^5 to 10^8 cells/test.

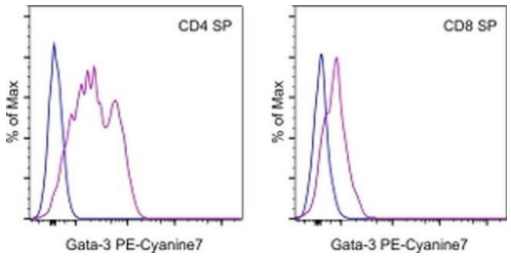
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL 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: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Gata-3 Monoclonal Antibody (TWAJ), PE-Cyanine7, eBioscience™



Gata-3 Antibody (25-9966-42) in Flow
C57Bl/6 thymocytes were surface stained with Anti-Mouse CD4 FITC (Product # 11-0042-82) and Anti-Mouse CD8a APC (Product # 17-0081-82) followed by intracellular staining with Rat IgG2b K Isotype Control PE-Cyanine7 (Product # 25-4031-82) (blue histogram) or Anti-Human/Mouse Gata-3 PE-Cyanine7 (purple histogram) using the Foxp3/Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol. Cells in the CD4 single positive (left) or CD8 single positive (right) gates were used for analysis.

View more figures on thermofisher.com

24 References

Flow Cytometry (24)

Journal of cell science

GM-CSF-activated human dendritic cells promote type 1 T follicular helper cell polarization in a CD40-dependent manner.

"Published figure using Gata-3 monoclonal antibody (Product # 25-9966-42) in Flow Cytometry"

Authors: Korniotis S,Saichi M,Trichot C,Hoffmann C,Amblard E,Viguier A,Grondin S,Noel F,Mattoo H,Soumelis V

Year
2022

Frontiers in immunology

Airway Administration of Bacterial Lysate OM-85 Protects Mice Against Respiratory Syncytial Virus Infection.

"Published figure using Gata-3 monoclonal antibody (Product # 25-9966-42) in Flow Cytometry"

Authors: Antunes KH,Cassão G,Santos LD,Borges SG,Poppe J,Gonçalves JB,Nunes EDS,Recacho GF,Sousa VB,Da Silva GS,Mansur D,Stein RT,Pasquali C,De Souza APD

Year
2022

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