

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

| Product Details | |
|-----------------------------|--|
| Size | 100 Tests |
| Species Reactivity | Human, Mouse, Pig, Rhesus monkey |
| Published Species | Mouse, Human |
| Host/Isotype | Rat / IgG2b, kappa |
| Recommended Isotype Control | Rat IgG2b kappa Isotype Control (eB149/10H5), PE, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | TWAJ |
| Conjugate | PE |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_1963600 |

| Applications | Tested Dilution | Publications |
|-----------------------|---------------------|-----------------|
| Flow Cytometry (Flow) | 5 µL (0.06 µg)/test | 45 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.

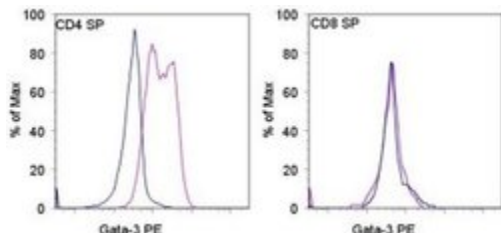
Applications Tested: This TWAJ antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of mouse thymocytes using the Foxp3/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol. Please see Best

Protocols Section (Staining Intracellular Antigens for Flow Cytometry) for staining protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This can be used at 5 μ L (0.06 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

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



Gata-3 Antibody (12-9966-42) in Flow

Staining of CD4 (Product # 11-0041-82) single positive (left) and CD8 (Product # 45-0081-82) single positive (right) BALB/c thymocytes using the Foxp3 Staining Buffer Set (Product # 00-5523-00) with Rat IgG2b K Isotype Control PE (Product # 12-4031-82) (blue histogram) or Anti-Human/Mouse Gata-3 PE (purple histogram).

45 References

Flow Cytometry (45)

Frontiers in immunology

CD4⁺ T Cell Fate Decisions Are Stochastic, Precede Cell Division, Depend on GITR Co-Stimulation, and Are Associated With Uropodium Development.

"12-9966 was used in Flow cytometry/Cell sorting to develop an in vitro model of T cell differentiation suited to testing how manipulation of components of the microenvironment might be therapeutically exploited."

Authors: Cobbold SP, Adams E, Howie D, Waldmann H

Species
Mouse

Dilution
Not Cited

Year
2022

Frontiers in immunology

Dietary Glucose Consumption Promotes RALDH Activity in Small Intestinal CD103⁺CD11b⁺ Dendritic Cells.

"12-9966 was used in Flow cytometry/Cell sorting to reveal previously underappreciated role of dietary glucose concentration in establishing regulatory properties in intestinal DCs, thereby extending a potential therapeutic module against intestinal inflammation."

Authors: Ko HJ, Hong SW, Verma R, Jung J, Lee M, Kim N, Kim D, Surh CD, Kim KS, Rudra D, Im SH

Species
Mouse

Dilution
Not Cited

Year
2021

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More applications with references on thermofisher.com

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