

# T-bet Monoclonal Antibody (eBio4B10 (4B10)), eFluor™ 660, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rhesus monkey
Published Species	Hamster, Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor™ 660, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio4B10 (4B10)
Conjugate	eFluor™ 660
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_10596655

Applications	Tested Dilution	Publications
Western Blot (WB)	-	2 Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	45 Publications

## Product Specific Information

**Description:** The eBio4B10 monoclonal antibody reacts with mouse and human T-bet. T-bet is a Th1-specific T-box transcription factor critical to the development of the Th1 CD4+ T cell lineage. This is known based on the observations that T-Bet deficient mice have impaired Th1 cell development, and that ectopic expression of T-Bet results in development skewed to the Th1 lineage. T-Bet expression is induced by the Th1 cytokine IFN gamma, and T-Bet also regulates the expression of IFN gamma, likely, at least in part, through the modification of DNA accessibility and histone remodeling. In addition to IFN gamma, T-Bet is also known to regulate the expression of IL-12R beta and IL-2. Moreover, T-Bet plays a role in class-switch recombination in B-cells.

**Applications Reported:** This eBio4B10 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

**Applications Tested:** This eBio4B10 antibody has been tested by intracellular staining and flow cytometric analysis of normal human peripheral blood cells. This can 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.

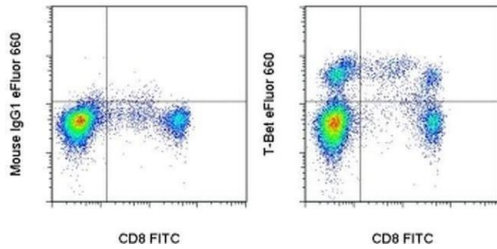
It is recommended to use the Foxp3/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol. Refer to Best Protocols for Staining Protocol (Protocol B: One step protocol for intracellular (nuclear) proteins)

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 668 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For T-bet Monoclonal Antibody (eBio4B10 (4B10)), eFluor™ 660, eBioscience™



### T-bet Antibody (50-5825-82) in Flow

Intracellular staining of normal human peripheral blood cells with Anti-Human CD8a FITC (Product # 11-0088-42) and 0.25 µg of Mouse IgG1 K Isotype Control eFluor® 660 (Product # 50-4714-82) (left) or 0.25 µg of Anti-Human/Mouse T-bet eFluor® 660 (right) using the Foxp3 Staining Buffer Set (Product # 00-5523-00) and protocol. Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](http://thermofisher.com)

## 48 References

### Western Blot (2)

Nature immunology

#### The cytotoxic T cell proteome and its shaping by the kinase mTOR.

"Published figure using T-bet monoclonal antibody (Product # 50-5825-82) in Western Blot"

Authors: Hukelmann JL, Anderson KE, Sinclair LV, Grzes KM, Murillo AB, Hawkins PT, Stephens LR, Lamond AI, Cantrell DA

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

World journal of gastroenterology

#### Mesenchymal stem cells alleviate TNBS-induced colitis by modulating inflammatory and autoimmune responses.

"Published figure using T-bet monoclonal antibody (Product # 50-5825-82) in Western Blot"

Authors: Chen QQ, Yan L, Wang CZ, Wang WH, Shi H, Su BB, Zeng QH, Du HT, Wan J

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2013

### Immunohistochemistry (1)

PloS one

#### Mitral and tufted cells are potential cellular targets of nitration in the olfactory bulb of aged mice.

"Published figure using T-bet monoclonal antibody (Product # 50-5825-82) in Immunohistochemistry"

Authors: Yang MJ, Sim S, Jeon JH, Jeong E, Kim HC, Park YJ, Kim IB

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2013

### Flow Cytometry (45)

Cell reports. Medicine

#### Heterologous arenavirus vector prime-boost overrules self-tolerance for efficient tumor-specific CD8 T cell attack.

"Published figure using T-bet monoclonal antibody (Product # 50-5825-82) in Flow Cytometry"

Authors: Bonilla WV, Kirchhammer N, Marx AF, Kallert SM, Krzyzaniak MA, Lu M, Darbre S, Schmidt S, Raguz J, Berka U, Vincenti I, Pauzuolis M, Kerber R, Hoepner S, Günther S, Magnus C, Merkler D, Orlinger KK, Zippelius A, Pinschewer DD

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

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### More applications with references on thermofisher.com

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