

Pacific Blue™ anti-T-bet

Catalog # / Size: 3824035 / 25 µg
3824040 / 100 µg

Clone: 4B10

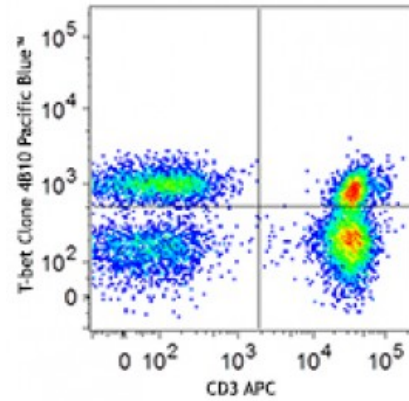
Isotype: Mouse IgG1, κ

Reactivity: Human, Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™ .

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



Human peripheral blood lymphocytes were surface stained with CD3 APC and then treated with True-Nuclear™ Transcription Factor Buffer Set (Cat# 424401). Cells were then stained with T-bet (clone 4B10) Pacific Blue™ (top) or mouse IgG1, κ

Applications:

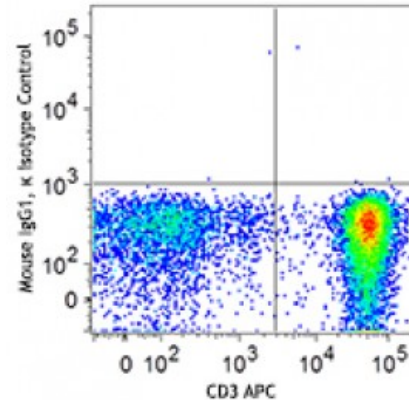
Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining . For flow cytometric staining, the suggested use of this reagent is 1.0 microg per million cells in a volume of 100 microL. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation² and immunofluorescence microscopy³.

NOTE: For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set (Cat. No. [424401](#)) offers improved staining and is highly recommended over the Foxp3 Fix/Perm Buffer Set (Cat. No. 421403) and the Nuclear Factor Fixation and



Permeabilization Buffer Set (Cat. No. 422601).

- Application** 1. Szabo SJ, *et al.* 2000. *Cell* 100:655. (ICFC, WB)
- References:** 2. Hwang ES, *et al.* 2005. *J. Exp. Med.* 202:1289. (ICFC, WB, IP)
3. Neurath MF, *et al.* 2002. *J. Exp. Med.* 195:1129. (IF)
4. Hsieh CY, *et al.* 2012. *J Pharmacol Exp.* 343:125. [PubMed](#).
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Description: T-bet, also known as T-box transcription factor T-bet, is considered to be a "master regulator" of Th1 lymphoid development controlling the production of the cytokine IFN- γ . T-bet is widely expressed in hematopoietic cells including stem cells, NK cells, B cells, and T cells. T-bet is critical for the control of microbial pathogens, and knockout animals show multiple physiologic and inflammatory features characteristic of asthma. T-bet expression is optimally observed after IL-12 stimulation and can be suppressed by addition of the Th2 cytokine IL-4 or neutralization of IL-12.

- Antigen** 1. Szabo SJ, *et al.* 2000. *Cell* 100:655.
- References:** 2. Szabo SJ, *et al.* 2002. *Science* 295:338.
3. Finotto S, *et al.* 2002. *Science* 295:336.
4. Mullen AC, *et al.* 2001. *Science* 292