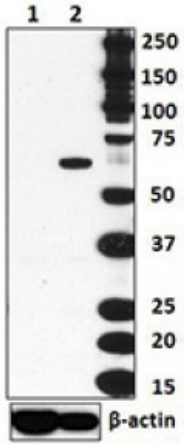
SONY

Product Data Sheet

Purified anti-T-bet

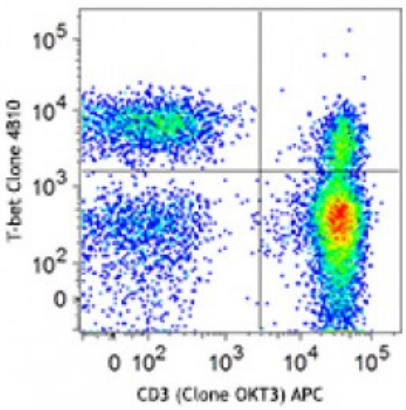
Catalog # / Size:	3824005 / 25 µg 3824010 / 100 µg
Clone:	4B10
Isotype:	Mouse IgG1, κ
Reactivity:	Human,Mouse
Preparation:	The antibody was purified by affinity chromatography.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



Total cell lysate from PBMC (lane 1, 15 microg) and PBMC treated with 5 microg/mL CD3 and 2 microg/mL CD28 (lane 2, 15 microg) were resolved by electrophoresis (4-12% Bis-Tris), transferred to nitrocellulose, and probed with purified anti-T-bet a

Applications:

Applications:	Other
Recommended Usage:	Each lot of this antibody is quality control tested . For Western blotting, the suggested use is 1 to 2 ug per ml. For flow cytometric staining, the suggested use of this reagent is 1.0 microg per million cells in a staining volume of 100 microL. It is recommended that the reagent be titrated for optimal performance for each application.
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).



Human peripheral blood lymphocytes were surface stained with CD3 (clone OKT3) APC and then treated with True-Nuclear™ Transcription Factor Buffer Set. The cells were then stained with purified T-bet (clone 4B10) followed by anti-mouse IgG1 PE.

Application References:

1. Szabo SJ, *et al.* 2000. *Cell* 100:655. (ICFC, WB)
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.

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 References:

1. Szabo SJ, *et al.* 2000. *Cell* 100:655.
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