

# **Anti-Human/Mouse Tbet-161Dy**

Catalog: 3161014B Clone: 4B10
Package Size: 100 tests Isotype: IgG1

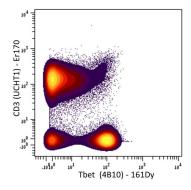
Storage: Store product at 4°C. Do not freeze. Formulation: Antibody stabilizer with 0.05% Sodium Azide

Reactivity: Human/Mouse

## **Technical Information**

**Validation:** Each lot of conjugated antibody is quality control tested by  $\mathsf{CyTOF}^{(\!R\!)}$  analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

**Recommended Usage:** The suggested use is 1  $\mu$ l for up to 3 X 10<sup>6</sup> live cells in 100  $\mu$ l. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human PBMCs were fixed, permeabilized, and stained with 170Er-anti-CD3 (UCHT1) and 161Dy-anti-Tbet (4B10).

## **Description**

T-bet (Tbx-21) is a transcription factor bearing a T-box DNA-binding domain, and is considered a "master-regulator" of the Th1 CD4+ T cell subset. T-bet was initially described as a potent transactivator that can promote IFN $\gamma$  production by initiating Th1 lineage development from naïve CD4+ T cells. T-bet specifies Th1 cell fate by initiating chromatin/histone remodeling of the IFN $\gamma$  gene and by inducing IL-12 receptor  $\beta$ 2 expression. T-bet also promotes the Th1 phenotype by actively suppressing Th2 differentiation by interfering with GATA-3 binding to its target DNA. In addition to T cells, T-bet is also expressed in B cells where it plays a role in class-switch recombination.

#### References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Ornatsky, O. I., et al. Highly Multiparametric Analysis by Mass Cytometry. J Immunol Methods 361 (1-2):1-20, 2010.

### For technical support visit fluidigm.com/support

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