

DESCRIPTION

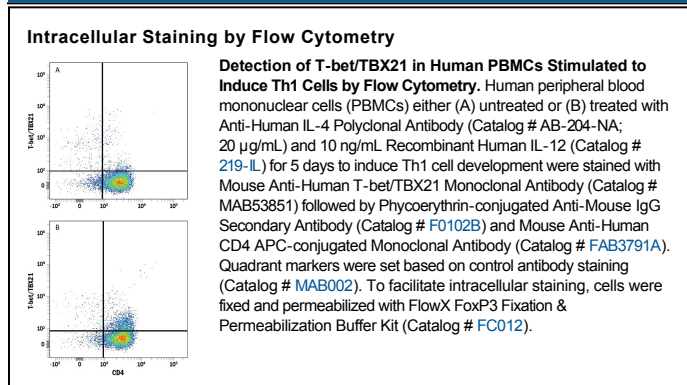
Species Reactivity	Human
Specificity	Detects human T-bet/TBX21 in direct ELISAs.
Source	Recombinant Monoclonal Mouse IgG ₁ Clone # 525831
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human T-bet/TBX21 Glu326-Asn535 Accession # Q9UL17
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

T-box expressed in T cells (T-bet), also known as T-box transcription factor TBX21, is a 62 kDa member of the T-box family of transcription factors and the Tbr1 subfamily. Human T-bet is 535 amino acids in length and contains a T-box DNA binding domain (aa 136-327). Human T-bet shares 88% aa sequence identity with mouse T-bet. T-bet is a nuclear protein highly apparent in Th1 cells. Northern blot analysis revealed that it is also expressed in lung, thymus and spleen. Functionally, T-bet controls the expression of the Th1 cytokine, IFN-γ, and initiates Th1 lineage development from naïve Th precursor cells by both activating Th1 genetic programs and by repressing the opposing Th2 programs.