

Human T-bet/TBX21 Antibody

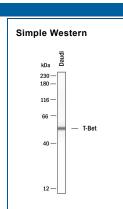
Monoclonal Mouse IgG_{2B} Clone # 1091005 Catalog Number: MAB11637

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects recombinant human T-bet protein in Direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1091005
Purification	Protein A or G purified from cell culture supernatant
Immunogen	E. coli-derived recombinant human T-bet Glu326-Asp535 Accession # Q9UL17
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

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 Western Blot Jurkat human acute T cell leukemia cell line, SUP-T1 $0.5 \mu g/mL$ human T cell lymphoblastic lymphoma cell line and Daudi human Burkitt's lymphoma cell line Simple Western 20 µg/mL Daudi human Burkitt's lymphoma cell line

DATA Western Blot kDa 250 150 37

Detection of Human Tbet/TBX21 by Western Blot. Western Blot shows lysates of Jurkat human acute T cell leukemia cell line, SUP-T1 human T cell lymphoblastic lymphoma cell line and Daudi human Burkitt's lymphoma cell line. PVDF membrane was probed with 0.5 µg/ml of Mouse Anti-Human T-bet/TBX21 Monoclonal Antibody (Catalog # MAB11637) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Tbet/TBX21 at approximately 58 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.



Detection of Human Tbet/TBX21 by Simple Western[™]. Simple Western shows lysates of Daudi human Burkitt's lymphoma cell line, loaded at 0.5 mg/ml. A specific band was detected for Tbet/TBX21 at approximately 54 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human T-bet/TBX21 Monoclonal Antibody (Catalog # MAB11637). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE	
Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
 - 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

<u>T-b</u>ox expressed in <u>T</u> 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, IFNy, and initiates Th1 lineage development from naïve Th precursor cells by both activating Th1 genetic programs and by repressing the opposing Th2 programs.

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