

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human T-bet protein in Direct ELISA.
Source	Recombinant Monoclonal Rabbit IgG Clone # 3126B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> derived- recombinant human T-Bet Glu326-Asp535 Accession # Q9UL17
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

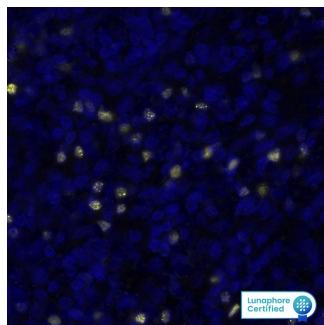
APPLICATIONS

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	Sample
Multiplex Immunofluorescence	25 µg/mL	Immersion fixed paraffin-embedded sections of human Spleen
Immunohistochemistry	1-10 µg/mL	Immersion fixed paraffin-embedded sections of human lymph node, lymph node tumor, and spleen

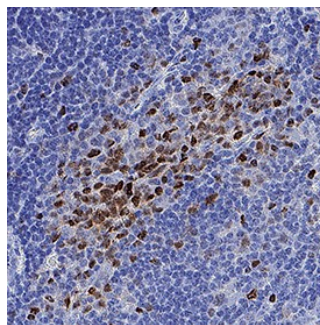
DATA

Multiplex Immunofluorescence



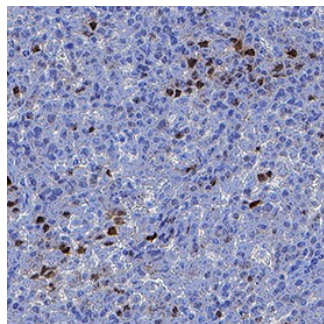
T-bet in Human Spleen via seqIF™ staining on COMET™
T-bet was detected in immersion fixed paraffin-embedded sections of human Spleen using Rabbit Anti-Human T-bet, Monoclonal Antibody (Catalog # MAB11692) at 25µg/mL at 37° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Eprelia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ Plus 647 Goat anti-Rabbit IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RB) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the nucleus. Protocol available in [COMET™ Panel Builder](#).

Immunohistochemistry



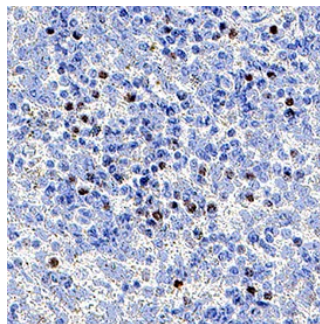
Detection of T-bet/TBX21 in Human Lymph Node. T-bet/TBX21 was detected in immersion fixed paraffin-embedded sections of human lymph node using Rabbit Anti-Human T-bet/TBX21 Monoclonal Antibody (Catalog # MAB11692) at 3 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003) or the HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Immunohistochemistry



Detection of T-bet/TBX21 in Human Lymph Node Tumor. T-bet/TBX21 was detected in immersion fixed paraffin-embedded sections of human lymph node tumor using Rabbit Anti-Human T-bet/TBX21 Monoclonal Antibody (Catalog # MAB11692) at 3 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003) or the HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Immunohistochemistry



Detection of T-bet/TBX21 in Human Spleen. T-bet/TBX21 was detected in immersion fixed paraffin-embedded sections of human spleen using Rabbit Anti-Human T-bet/TBX21 Monoclonal Antibody (Catalog # MAB11692) at 3 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003) or the HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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.