

Product datasheet

Anti-T-bet / Tbx21 antibody [EPR27094-16] α b307193

Recombinant **RabMAb**

2 References [16 Images](#)

Overview

Product name	Anti-T-bet / Tbx21 antibody [EPR27094-16]
Description	Rabbit monoclonal [EPR27094-16] to T-bet / Tbx21
Host species	Rabbit
Specificity	ICC/IF: Unsuitable for mouse samples
Tested applications	Suitable for: ICC/IF, Flow Cyt (Intra), IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: No-GFP-CD16. NK-92, K-562, Mouse spleen and Rat spleen lysates. IHC-P: Human tonsil, Human non-Hodgkin's lymphoma, Mouse spleen, Rat spleen, Mouse Burkitt's lymphoma and Human cerebrum tissues. ICC/IF: No-GFP-CD16.NK-92 cells. Flow Cyt: Human peripheral blood mononuclear, Human peripheral blood mononuclear, K562, Mouse peripheral blood mononuclear and Mouse splenocytes cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS</p>
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR27094-16
Isotype	IgG

Applications

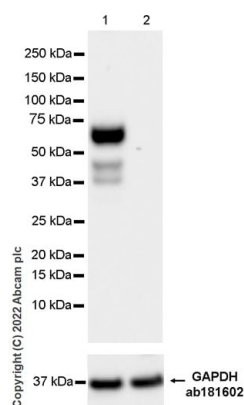
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab307193 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/500.
Flow Cyt (Intra)		1/500.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 58 kDa.

Target

Function	Transcription factor that controls the expression of the TH1 cytokine, interferon-gamma. Initiates TH1 lineage development from naive TH precursor cells both by activating TH1 genetic programs and by repressing the opposing TH2 programs.
Tissue specificity	T-cell specific.
Involvement in disease	Genetic variations in TBX21 are associated with susceptibility to asthma with nasal polyps and aspirin intolerance (ANPAI) [MIM:208550]. A condition consisting of asthma, aspirin sensitivity and nasal polyposis. Nasal polyposis is due to chronic inflammation of the paranasal sinus mucosa, leading to protrusion of edematous polyps into the nasal cavities.
Sequence similarities	Contains 1 T-box DNA-binding domain.
Cellular localization	Nucleus.

Images



Western blot - Anti-T-bet / Tbx21 antibody
[EPR27094-16] (ab307193)

All lanes : Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)
at 1/1000 dilution

Lane 1 : No-GFP-CD16. NK-92 (human malignant non-Hodgkin's lymphoma natural killer cell) whole cell lysate 20 µg

Lane 2 : K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate 20 µg

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated
([ab97051](#)) at 1/100000 dilution

Predicted band size: 58 kDa

Observed band size: 60 kDa

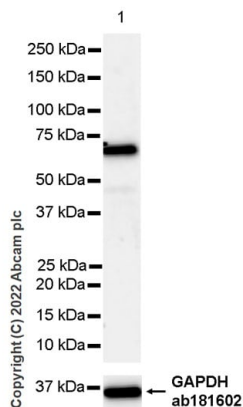
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: K-562

In lane 1, the lysate was freshly made and used for Western Blotting immediately to minimize protein degradation.

The identity of the bands below 50 kDa are unknown.

Exposure time: 15 seconds.



Western blot - Anti-T-bet / Tbx21 antibody
[EPR27094-16] (ab307193)

Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193) at 1/1000 dilution + mouse spleen tissue lysate 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/100000 dilution

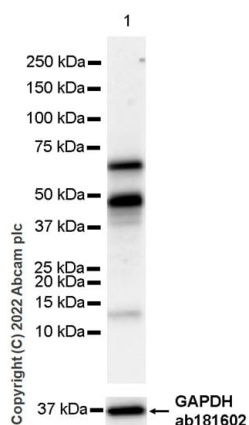
Predicted band size: 58 kDa

Observed band size: 60 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The lysate was freshly made and used for Western Blotting immediately to minimize protein degradation.

Exposure time: 180 seconds.



Western blot - Anti-T-bet / Tbx21 antibody
[EPR27094-16] (ab307193)

Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193) at 1/1000 dilution + rat spleen tissue lysate 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/100000 dilution

Predicted band size: 58 kDa

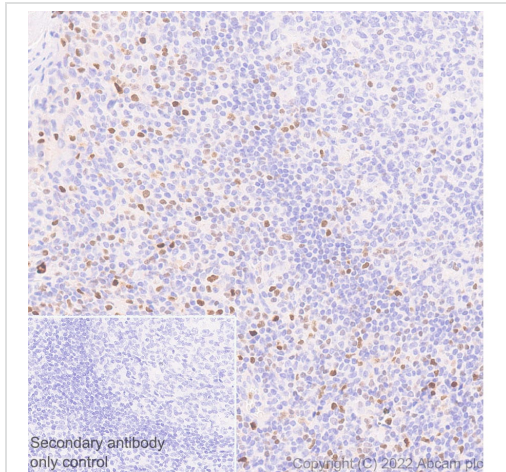
Observed band size: 60 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The lysate was freshly made and used for Western Blotting immediately to minimize protein degradation.

The identity of the bands below 50 kDa are unknown.

Exposure time: 103 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

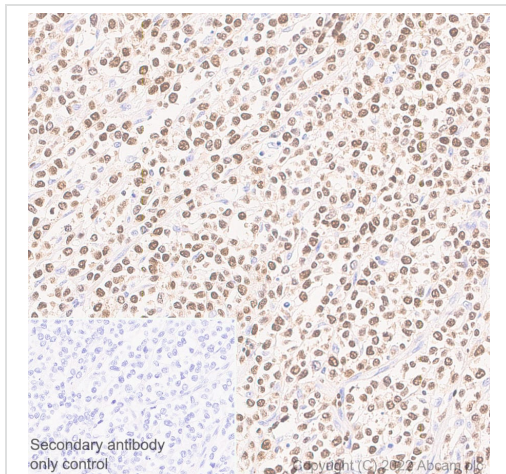
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml) followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Nuclear staining on human tonsil.

The section was incubated with ab307193 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

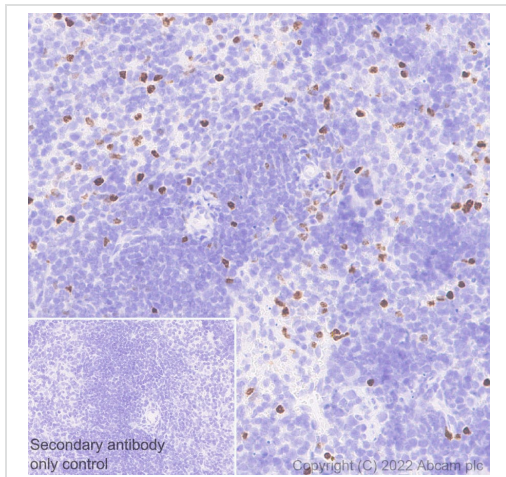
Immunohistochemical analysis of paraffin-embedded human non-Hodgkin's lymphoma (T cell) tissue labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml) followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Nuclear staining on human non-Hodgkin's lymphoma (T cell).

The section was incubated with ab307193 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

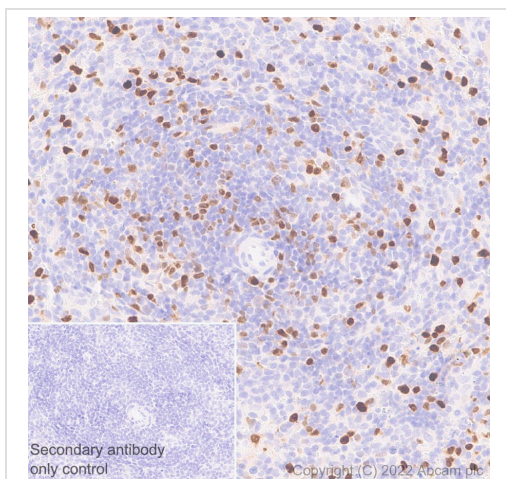
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml) followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Nuclear staining on mouse spleen.

The section was incubated with ab307193 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

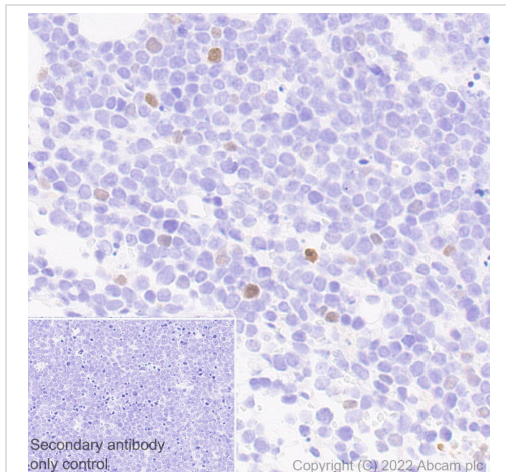
Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml) followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Nuclear staining on rat spleen.

The section was incubated with ab307193 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

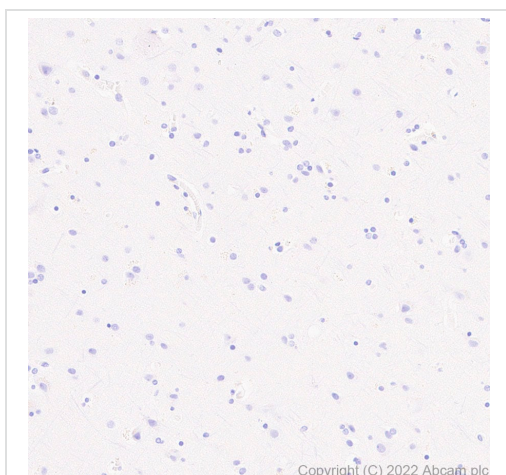
Immunohistochemical analysis of paraffin-embedded mouse Burkitt's lymphoma tissue labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml) followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Nuclear staining on mouse Burkitt's lymphoma.

The section was incubated with ab307193 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

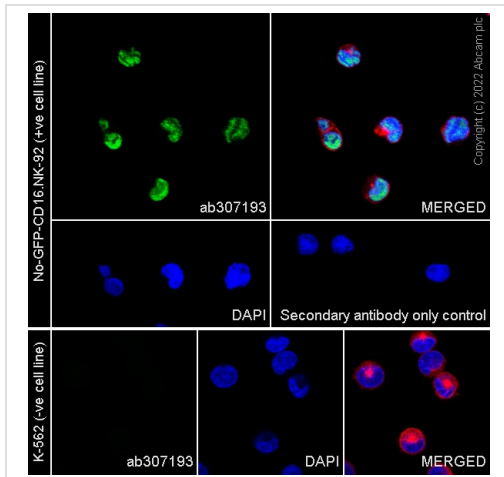
Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml) followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: No staining on human cerebrum.

The section was incubated with ab307193 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

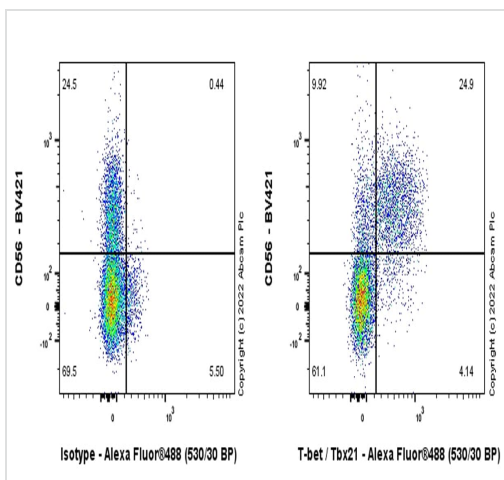
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized No-GFP-CD16.NK-92 (CD16 ectopically expressed natural killer(NK-92®) cell with no GFP tag) cells labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (1.044 µg/ml), followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 µg/ml) (Green).

Confocal image showing nuclear staining in No-GFP-CD16.NK-92 cell line.

Negative control: K562.

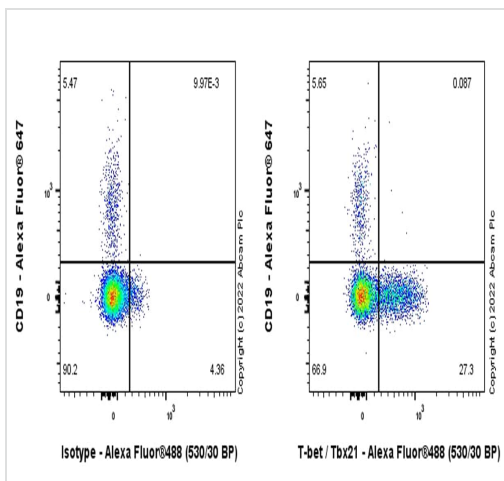
Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 µg/ml) (Red). Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml).



Flow Cytometry (Intracellular) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized human peripheral blood mononuclear cell (PBMC) cells labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (0.1 µg)/ Right compared with a Rabbit monoclonal IgG (**ab172730**) / Left isotype control. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody. Live cells were stained with anti-CD56 conjugated to BV421. Fixed with 2% PFA for 10 min followed by intracellularly staining with rabbit IgG or ab307193.



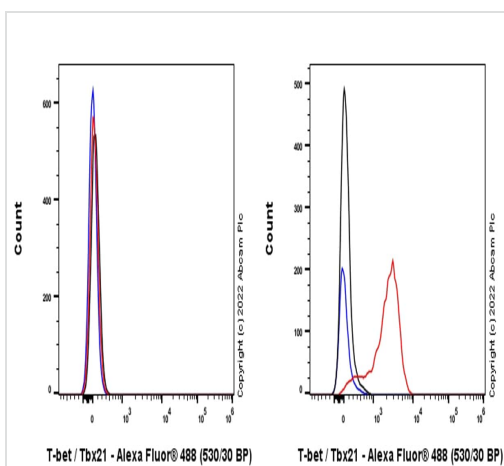
Flow Cytometry (Intracellular) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized human peripheral blood mononuclear cell (PBMC) cells labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (0.1µg)/ Right (Red) compared with a Rabbit monoclonal IgG (**ab172730**) / Left isotype control. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.

Negative control: CD19+ population.

Live cells were stained with anti-CD19 conjugated to Alexa Fluor® 647.

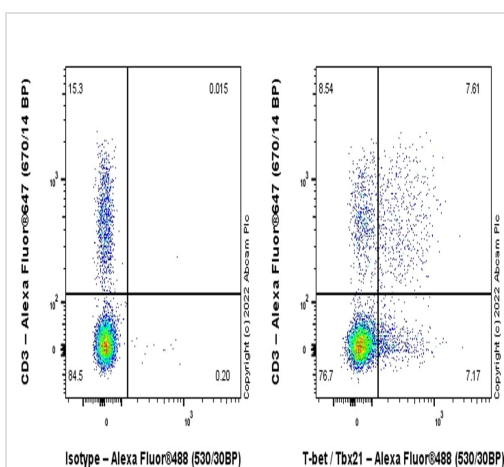
Fixed with 2% PFA for 10 min followed by intracellularly staining with rabbit IgG or ab307193.



Flow Cytometry (Intracellular) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized K562 (human chronic myelogenous leukemia lymphoblast, Left) / No-GFP-CD16.NK-92 (CD16 ectopically expressed natural killer(NK-92®) cell with no GFP tag) (Right) cells labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.

Negative control: K562.

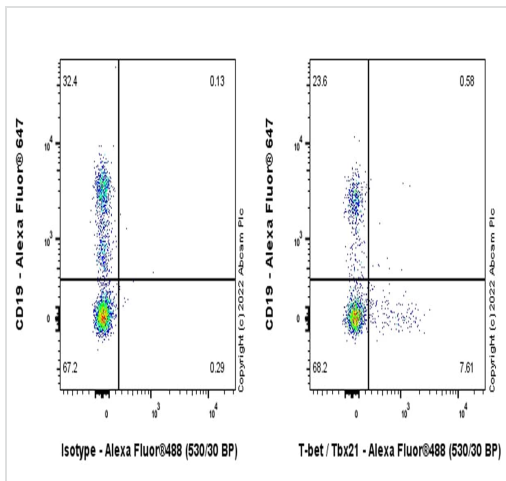


Flow Cytometry (Intracellular) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized mouse splenocytes labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (0.1µg)/ Right compared with a Rabbit monoclonal IgG (**ab172730**) / Left isotype control. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.

Live cells were stained with anti-CD3 conjugated to Alexa Fluor® 647.

Fixed with 2% PFA for 10 min followed by intracellularly staining with rabbit IgG or ab307193.



Flow Cytometry (Intracellular) - Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

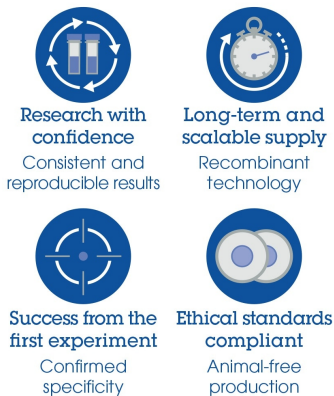
Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized mouse peripheral blood mononuclear cell (PBMC) cells labeling T-bet / Tbx21 with ab307193 at 1/500 dilution (0.1 µg) / Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.

Negative control: CD19+ population.

Live cells were stained with anti-CD19 conjugated to Alexa Fluor® 647.

Fixed with 2% PFA for 10 min followed by intracellularly staining with rabbit IgG or ab307193.

Why choose a recombinant antibody?



Anti-T-bet / Tbx21 antibody [EPR27094-16] (ab307193)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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