abcam

Product datasheet

Anti-TCR V beta 5.3 antibody [W112] ab171099

3 Images

Overview

Product name	Anti-TCR V beta 5.3 antibody [W112]
Description	Mouse monoclonal [W112] to TCR V beta 5.3
Host species	Mouse
Tested applications	**Suitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Full length protein corresponding to Human TCR V beta 5.3. Native protein Database link: **P04435**
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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	Preservative: 0.1% Sodium azide Constituents: 0.5% BSA, 99% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	W112
Isotype	IgG1

Applications

The Abpromise guarantee	Our **Abpromise guarantee** covers the use of ab171099 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
Flow Cyt		Use at an assay dependent concentration. 1- 2 µg/Test **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

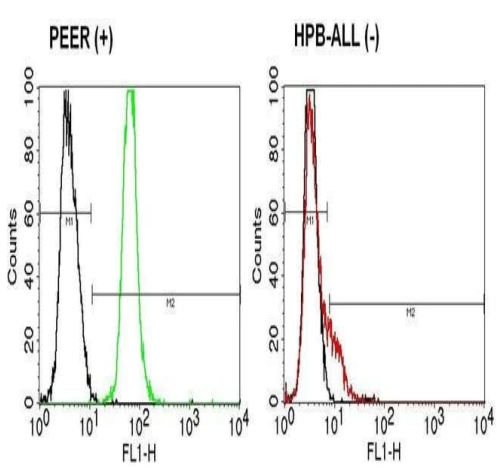
Relevance

T cell receptors (TCR) recognize foreign antigens which have been processed as small peptides and bound to major histocompatibility complex (MHC) molecules at the surface of antigen presenting cells (APC). Each T cell receptor is a dimer consisting of one alpha and one beta chain or one delta and one gamma chain. This region represents the germline organization of the T cell receptor beta locus. The beta locus includes V (variable), J (joining), diversity (D), and C (constant) segments. During T cell development, the beta chain is synthesized by a recombination event at the DNA level joining a D segment with a J segment; a V segment is then joined to the D-J gene. The C segment is later joined by splicing at the RNA level.

Cellular localization

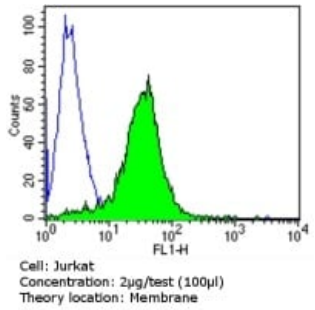
Plasma membrane

Images



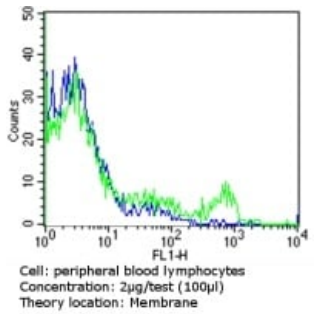
Flow Cytometry - Anti-TCR V beta 5.3 antibody [W112] (ab171099)

Flow cytometric analysis of TCR V beta 5.3 in positive PEER cells (left) stained with 5 uL ab171099 and FITC labelled secondary. Compared to negative control: HPB-ALL cells (right). A representative 10,000 cells were acquired for each sample.



Flow Cytometry - Anti-TCR V beta 5.3 antibody [W112] (ab171099)

Flow cytometry analysis of TCR V beta 5b in Jurkat cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of 1-5x10^6 cells/ml, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a TCR V beta 5b monoclonal antibody (ab171099) at a dilution of 2 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.



Flow Cytometry - Anti-TCR V beta 5.3 antibody [W112] (ab171099)

Flow cytometry analysis of TCR V beta 5b in PBMC cells (green) compared to an isotype control (blue). Human blood was collected, combined with a hydrophilic polysaccharide, centrifuged, transferred to a conical tube and washed with PBS. 50 ul of cell solution was added to each tube at a dilution of 2x10^7 cells/ml, followed by the addition of 50 ul of isotype control and primary antibody (ab171099) at a dilution of 2 ug/test. Cells were incubated for 30 min at 4ºC and washed with a cell buffer, followed by incubation with a DyLight 488-conjugated goat anti-mouse IgG (H+L) secondary for 30 min at 4ºC in the dark. FACS analysis was performed using 400 ul of cell buffer.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors