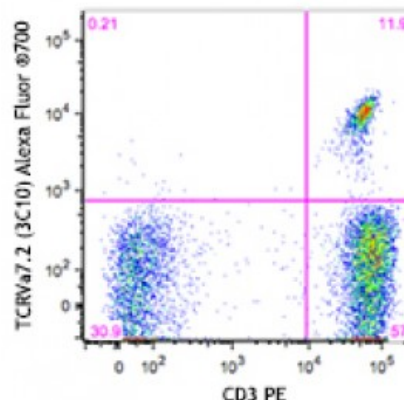


Alexa Fluor® 700 anti-human TCR Vα7.2

Catalog # / Size:	2358640 / 100 tests 2358635 / 25 tests
Clone:	3C10
Isotype:	Mouse IgG1, κ
Immunogen:	Recombinant TCR
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Concentration:	Lot-specific



Human peripheral blood lymphocytes were stained with CD3 and TCR Vα7.2 (clone 3C10) Alexa Fluor® 700 (top), or mouse IgG1, κ Alexa Fluor® 700 isotype control (bottom).

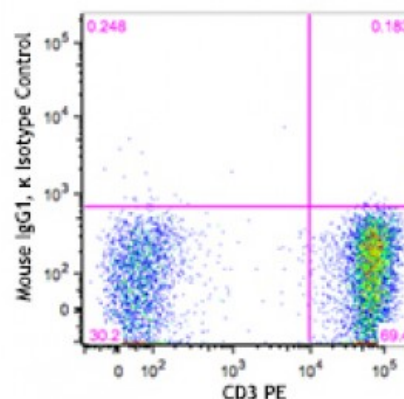
Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes:	Associated with an anti-CD161 or -IL18Rα staining, the 3C10 antibody allows unequivocal identification of MAIT cells. Importantly, the Vα7.2 segment can also be used by conventional T cells. Therefore, the 3C10 also stains a subset of conventional CD4 and CD8 T cells.
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Application References:	1. Martin E, <i>et al.</i> 2009. <i>PLoS Biol.</i> 7:525. 2. Wakao H, <i>et al.</i> 2013. <i>Cell Stem Cell</i> 12:1. PubMed
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Description: The 3C10 antibody recognizes the V α 7.2 T cell antigen receptor (TCR) α -chain segment which, joined with the J α 33 segment, constitutes an invariant TCR that is a characteristic of the mucosal-associated invariant T cells (MAIT cells). MAIT cells are restricted by a nonpolymorphic class Ib major histocompatibility complex (MHC) molecule, MHC-related molecule 1 (MR1). MAIT cells are present in human blood (1-8% of T cells), mesenteric lymph nodes, liver, and intestinal mucosa. MAIT cells play a role in detecting and fighting off microbial infections.

Antigen 1. Le Bourhis L, *et al.* 2010. *Nat. Immunol.* 11:701.
References: