

APC anti-Th-POK (ZFP-67) Antibody

Catalog# / Size	656405 / 25 tests 656406 / 100 tests
Clone	11H11A14
Regulatory Status	RUO
Other Names	T-helper-inducing POZ/Krüppel-like factor, Zinc finger and BTB domain-containing protein 7B (ZBTB7B), Krüppel-related zinc finger protein (cKrox), Zinc finger protein 67 homolog (ZFP-67)
Isotype	Mouse IgG1, κ
Description	Th-POK is a member of the BTB-POZ domain-containing zinc finger transcription factor family. It regulates gene expression during intrathymic T cell differentiation. A single autosomal recessive mutation of the Th-POK gene results in the absence of mature CD4+ helper T cells, called helper-deficient (HD) phenotype. In Th-POK deficient mice, MHC class II restricted thymocytes are redirected to the CD8+ T cell lineage. On the contrary, forced expression of Th-POK redirects MHC class I restricted thymocytes to the CD4+ T cell lineage. Inactivation of Th-POK in mature CD4+ T cells results in induction of the genes preferentially expressed in CD8+ T cells, such as CD8, granzyme B, and IFN-γ. These findings suggest that Th-POK is essential in promoting commitment of immature T cells to the CD4 lineage and maintaining the characteristics of mature CD4+ T helper cells.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Partial human Th-POK recombinant protein (197-345 a.a.)
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze .
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	NOTE: For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set (Cat. No. 424401) offers improved staining and is highly recommended. This clone displays a similar affinity to BioLegend clone W15147A by western blot. However, this clone does not recognize mouse TH-POK.
RRID	AB_2910491 (BioLegend Cat. No. 656405) AB_2910491 (BioLegend Cat. No. 656406)

Antigen Details

Structure	539 amino acids, predicted molecular weight of 58 kD; contains four C2H2-type zinc finger regions that are responsible for DNA binding; contains a BTB-POZ domain which is involved in homodimerization and association with other factors
Distribution	Nucleus
Function	Transcription factor that regulates CD4 lineage commitment of immature T-cell precursors; acts as a transcriptional repressor of collagen and fibronectin genes
Interaction	Acetyltransferase p300
Biology Area	Cell Biology, Immunology, Transcription Factors
Molecular Family	TCRs
Antigen References	<ol style="list-style-type: none">1. Kappes DJ. 2010. <i>Immunol. Rev.</i> 238:182.2. Mariani F, et al. 2013. <i>PLoS One.</i> 8:e54488.3. Zhang M, et al. 2010. <i>J. Immunol.</i> 185:3960.4. Egawa T, et al. 2008. <i>Nat. Immunol.</i> 9:1131.5. Wildt KF, et al. 2007. <i>J. Immunol.</i> 179:4405.6. Setoguchi R, et al. 2009. <i>J. Immunol.</i> 183:4467.
Gene ID	51043

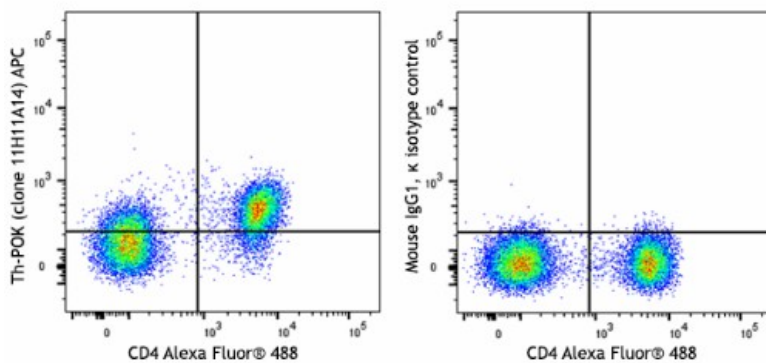
Related Protocols

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-Th-POK (ZFP-67), PE anti-Th-POK (ZFP-67), APC anti-Th-POK (ZFP-67), PE/Cyanine7 anti-Th-POK (ZFP-67)

Product Data



Human PBMC lymphocytes were surface stained with anti-human CD4 Alexa Fluor® 488, and were fixed and permeabilized with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with anti-Th-POK (ZFP-67) (clone 11H11A14) APC (left) or mouse IgG1, κ APC isotype control (right).

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