

# ThPOK Monoclonal Antibody (2POK), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2POK
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11149862

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	1 Publication

## Product Specific Information

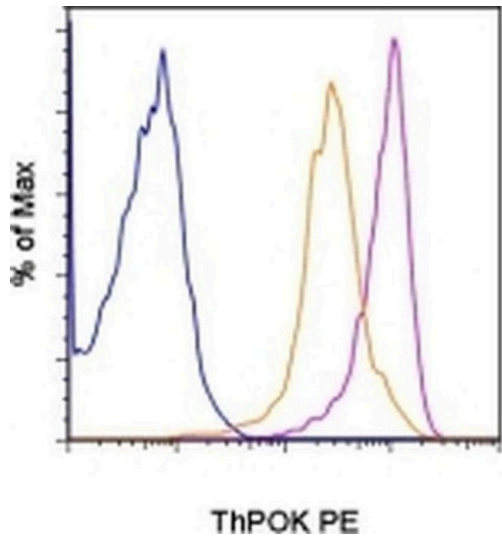
**Description:** This 2POK monoclonal antibody reacts with mouse ThPOK, which is also known as c-Krox and Zbtb7b. In hematopoietic cells, this 78 kDa transcription factor is expressed in thymocytes and T lymphocytes in the spleen and lymph nodes. In non-hematopoietic cells, ThPOK can be detected in the skin, heart, smooth muscle, and liver. Studies demonstrate that ThPOK promotes CD4+ lineage differentiation by inhibiting the expression of CD8 lineage-specific genes such as Runx3. ThPOK has also been shown to inhibit Cd4 silencing, another key facet required for differentiation to the CD4+ lineage. In addition to its role in thymocyte development, ThPOK is involved in the effector functions of invariant natural killer T (iNKT) cells and gamma delta T cells.

**Applications Reported:** This 2POK antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

**Applications Tested:** This 2POK antibody has been tested by intracellular staining and flow cytometric analysis of mouse thymocytes using the Foxp3/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Excitation:** 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.



**ThPOK Antibody (12-5928-82) in Flow**  
C57Bl/6 thymocytes were stained with Anti-Mouse CD4 APC (Product # 17-0041-82) and Anti-Mouse CD8a FITC (Product # 11-0081-82), followed by intracellular staining with 0.125 µg of Rat IgG2a K Isotype Control PE (Product # 12-4321-80) (blue histogram) or 0.125 µg of Anti-Mouse ThPOK PE using the Foxp3 Staining Buffer Set and protocol (Product # 00-5523-00). The histogram demonstrates ThPOK staining of CD4 SP (purple histogram) and CD8 SP (orange histogram) thymocytes.

1 Reference

Flow Cytometry (1)

PLoS biology	Year
<b>NKT cell-TCR expression activates conventional T cells in vivo, but is largely dispensable for mature NKT cell biology.</b>	2014
Authors: Vahl JC,Heger K,Knies N,Hein MY,Boon L,Yagita H,Polic B,Schmidt-Suppran M	

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