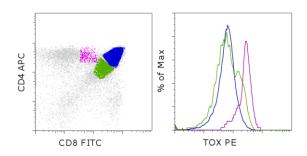


An Affymetrix Company

Anti-Human/Mouse TOX PE

Catalog Number: 12-6502

Also known as: Thymocyte selection-associated HMG box protein RUO: For Research Use Only. Not for use in diagnostic procedures.



C57BI/6 thymocytes were stained with Anti-Mouse CD4 APC (cat. 17-0041) and Anti-Mouse CD8a FITC (cat. 11-0081), followed by intracellular staining with 0.5 ug of Anti-Human/Mouse TOX PE using the Foxp3 Staining Buffer Set and protocol (cat. 00-5521). The histogram (right) demonstrates TOX staining of CD4+CD8+ (blue histogram), CD4loCD8lo (green histogram), and CD4+CD8lo (purple) thymocytes. Cell populations were gated as indicated on the dot plot (left). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human/Mouse TOX PE

Catalog Number: 12-6502

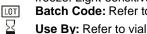
Clone: TXRX10

Concentration: 0.2 mg/mL Host/Isotype: Rat IgG2a, kappa



Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.



Batch Code: Refer to vial



This TXRX10 monoclonal antibody reacts with human and mouse TOX, which is also known as Thymocyte selectionassociated HMG box protein. This DNA-binding nuclear factor is expressed in thymocytes, T lymphocytes, NK cells, and lymphoid tissue-inducer (LTi) cells. TOX expression in thymocytes is upregulated during beta-selection and positive selection. Studies using Tox knockout mice have demonstrated a critical role for TOX in CD4+ T cell development as a regulator of the CD4loCD8lo to CD4+CD8lo transition. Moreover, TOX has been shown to be involved in the development of NK and LTi cells. While its regulation remains unclear, TOX expression has been shown to be induced by calcineurin-mediated TCR signaling in thymocytes during positive selection.

Applications Reported

This TXRX10 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This TXRX10 antibody has been tested intracellular flow cytometric analysis of mouse thymocytes using the Foxp3 Buffers (cat. 00-5521) and protocol. This can be used at less than or equal to 0.5 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Aliahmad P, de la Torre B, Kaye J. Shared dependence on the DNA-binding factor TOX for the development of lymphoid tissue-inducer cell and NK cell lineages. Nat Immunol. 2010 Oct;11(10):945-52.

Aliahmad P, Kaye J. Development of all CD4 T lineages requires nuclear factor TOX. J Exp Med. 2008 Jan 21;205(1):245-56.

Aliahmad P, O'Flaherty E, Han P, Goularte OD, Wilkinson B, Satake M, Molkentin JD, Kaye J. TOX provides a link between calcineurin activation and CD8 lineage commitment. J Exp Med. 2004 Apr 19:199(8):1089-99.



An Affymetrix Company

Anti-Human/Mouse TOX PE

Catalog Number: 12-6502

Also known as: Thymocyte selection-associated HMG box protein RUO: For Research Use Only. Not for use in diagnostic procedures.

Wilkinson B, Chen JY, Han P, Rufner KM, Goularte OD, Kaye J. TOX: an HMG box protein implicated in the regulation of thymocyte selection. Nat Immunol. 2002 Mar;3(3):272-80.

Related Products

00-5521 Foxp3 Fixation/Permeabilization Concentrate and Diluent 00-5523 Foxp3 / Transcription Factor Staining Buffer Set 11-0081 Anti-Mouse CD8a FITC (53-6.7) 17-0041 Anti-Mouse CD4 APC (GK1.5)