

TOX antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI10549

Specification

TOX antibody - N-terminal region - Product Information

Application WB **Primary Accession** 094900

Other Accession NM 014729, NP 055544

Reactivity Human, Mouse, Rat, Horse, Bovine, Dog Predicted Human, Mouse, Rat, Pig, Chicken, Bovine,

> Dog **Rabbit Polyclonal**

Host Clonality Calculated MW 58kDa KDa

TOX antibody - N-terminal region - Additional Information

Gene ID 9760

Alias Symbol **KIAA0808, TOX1**

Other Names

Thymocyte selection-associated high mobility group box protein TOX, Thymus high mobility group box protein TOX, TOX, KIAA0808

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-TOX antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

TOX antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

TOX antibody - N-terminal region - Protein Information

Name TOX {ECO:0000303|PubMed:21126536, ECO:0000312|HGNC:HGNC:18988}

Function

Transcriptional regulator with a major role in neural stem cell commitment and corticogenesis as well as in lymphoid cell development and lymphoid tissue organogenesis (By similarity). Binds to GC-rich DNA sequences in the proximity of transcription start sites and may alter chromatin structure, modifying access of transcription factors to DNA. During cortical development, controls the neural stem cell pool by inhibiting the switch from proliferative to differentiating progenitors. Beyond progenitor cells, promotes neurite outgrowth in newborn neurons migrating to reach the cortical plate. May activate or repress critical genes for neural stem cell fate such as SOX2, EOMES



and ROBO2 (By similarity). Plays an essential role in the development of lymphoid tissue-inducer (LTi) cells, a subset necessary for the formation of secondary lymphoid organs: peripheral lymph nodes and Peyer's patches. Acts as a developmental checkpoint and regulates thymocyte positive selection toward T cell lineage commitment. Required for the development of various T cell subsets, including CD4-positive helper T cells, CD8-positive cytotoxic T cells, regulatory T cells and CD1D-dependent natural killer T (NKT) cells. Required for the differentiation of common lymphoid progenitors (CMP) to innate lymphoid cells (ILC) (By similarity). May regulate the NOTCH-mediated gene program, promoting differentiation of the ILC lineage. Required at the progenitor phase of NK cell development in the bone marrow to specify NK cell lineage commitment (By similarity) (PubMed:21126536). Upon chronic antigen stimulation, diverts T cell development by promoting the generation of exhaustive T cells, while suppressing effector and memory T cell programming. May regulate the expression of genes encoding inhibitory receptors such as PDCD1 and induce the exhaustion program, to prevent the overstimulation of T cells and activation- induced cell death (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00267}.

Tissue Location

Expressed in NK cells (PubMed:21126536). Highly expressed in tumor-infiltrating CD8-positive T cells (at protein level) (PubMed:31207604).

TOX antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture