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Anti-TOX Antibody (aa450-525)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18396

Product Information

Application	WB, IHC-P
Primary Accession	O94900
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57513
Concentration (mg/ml)	0.5 mg/ml

Additional Information

Gene ID	9760
Alias Symbol	TOX
Other Names	TOX, KIAA0808, TOX1
Target/Specificity	Human TOX
Reconstitution & Storage	Purified
Precautions	Anti-TOX Antibody (aa450-525) is for research use only and not for use in diagnostic or therapeutic procedures.

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).