

Foxp3 Antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al11217

Specification

Foxp3 Antibody - N-terminal region - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Calculated MW WB <u>O99JB6</u> <u>NM_054039</u>, <u>NP_473380</u> Mouse, Rat, Rabbit Mouse, Rat, Rabbit Rabbit Polyclonal 47kDa KDa

Foxp3 Antibody - N-terminal region - Additional Information

Gene ID 20371

Alias Symbol **Other Names** Forkhead box protein P3, Scurfin, Foxp3 JM2, scurfin, sf

Format

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-Foxp3 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 Foxp3 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Foxp3 Antibody - N-terminal region - Protein Information

Name Foxp3

Function

Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg) (PubMed:22813742). Plays an essential role in maintaining homeostasis of the immune system by allowing the acquisition of full suppressive function and stability of the Treg lineage, and by directly modulating the expansion and function of conventional T-cells. Can act either as a transcriptional repressor or a transcriptional activator depending on its interactions with other transcription factors, histone acetylases and deacetylases. The suppressive activity of Treg involves the coordinate activation of many genes, including CTLA4 and TNFRSF18 by FOXP3 along with repression of genes encoding cytokines such as interleukin-2 (IL2) and



interferon-gamma (IFNG). Inhibits cytokine production and T-cell effector function by repressing the activity of two key transcription factors, RELA and NFATC2 (PubMed:15790681). Mediates transcriptional repression of IL2 via its association with histone acetylase KAT5 and histone deacetylase HDAC7 (By similarity). Can activate the expression of TNFRSF18, IL2RA and CTLA4 and repress the expression of IL2 and IFNG via its association with transcription factor RUNX1 (PubMed:17377532). Inhibits the differentiation of IL17 producing helper T-cells (Th17) by antagonizing RORC function, leading to down-regulation of IL17 expression, favoring Treg development (PubMed:18368049). Inhibits the transcriptional activator activity of RORA (By similarity). Can repress the expression of IL2 and IFNG via its association with transcription factor IKZF4 (PubMed:19696312).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:17377532, ECO:0000269|PubMed:18368049}. Cytoplasm {ECO:0000250|UniProtKB:Q9BZS1}. Note=Predominantly expressed in the cytoplasm in activated conventional T-cells whereas predominantly expressed in the nucleus in regulatory T-cells (Treg) (By similarity) The 41 kDa form derived by proteolytic processing is found exclusively in the chromatin fraction of activated Treg cells {ECO:0000250|UniProtKB:Q9BZS1, ECO:0000269|PubMed:19117830}

Tissue Location

High level of expression in thymus and spleen.

Foxp3 Antibody - N-terminal region - Protocols

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

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

Foxp3 Antibody - N-terminal region - Images





Sample Tissue: Mouse Liver lysates Antibody Dilution: $1.0 \mu g/ml$