

**FOXP3 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10542****Specification**

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**FOXP3 Antibody - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | WB                        |
| Primary Accession | <a href="#">O99JB6</a>    |
| Other Accession   | <a href="#">NP_473380</a> |
| Reactivity        | Human, Mouse              |
| Host              | Rabbit                    |
| Clonality         | Polyclonal                |
| Isotype           | Rabbit IgG                |
| Calculated MW     | 47346                     |

**FOXP3 Antibody - Additional Information****Gene ID** 20371**Application & Usage**

**Western blotting (0.5-4 µg/ml).** However, the optimal concentrations should be determined individually. The antibody recognizes ~52 kDa FOXP3 from samples of human, mouse and rat origins. Mouse small intestine and rat kidney tissue lysates can be used as positive controls.

**Other Names**

foxp3 , Forkhead box P3 , IPEX , JM2 , MGC141961 , MGC141963 , PIDX , XPID

**Target/Specificity**

FOXP3

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) Protein A affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

## Precautions

FOXP3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## FOXP3 Antibody - Protein Information

### Name Foxp3

### Function

Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg) (PubMed:<a href="http://www.uniprot.org/citations/22813742" target="\_blank">22813742</a>). 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:<a href="http://www.uniprot.org/citations/15790681" target="\_blank">15790681</a>). 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:<a href="http://www.uniprot.org/citations/17377532" target="\_blank">17377532</a>). 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:<a href="http://www.uniprot.org/citations/18368049" target="\_blank">18368049</a>). 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:<a href="http://www.uniprot.org/citations/19696312" target="\_blank">19696312</a>).

### 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 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

**FOXP3 Antibody - Images****FOXP3 Antibody - Background**

FOXP3 a member of the forkhead/wing-helix family of transcriptional regulators and is highly conserved in humans. It has been proposed that FOXP3 may be a master regulatory gene and marker for Treg cells. Recent reports also suggest expression of FOXP3 on subpopulation of rat CD8+ cells.