

FOXP3 Polyclonal Antibody
Catalog # AP73629**Specification**

FOXP3 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	Q9BZS1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

FOXP3 Polyclonal Antibody - Additional Information**Gene ID** 50943**Other Names**

FOXP3; IPEX; JM2; Forkhead box protein P3; Scurfin

Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

FOXP3 Polyclonal Antibody - Protein Information**Name** FOXP3**Synonyms** IPEX**Function**

Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg) (PubMed: [17377532](http://www.uniprot.org/citations/17377532) target="_blank">17377532, PubMed: [21458306](http://www.uniprot.org/citations/21458306) target="_blank">21458306, PubMed: [23947341](http://www.uniprot.org/citations/23947341) target="_blank">23947341, PubMed: [24354325](http://www.uniprot.org/citations/24354325) target="_blank">24354325, PubMed: [24722479](http://www.uniprot.org/citations/24722479) target="_blank">24722479, PubMed: [24835996](http://www.uniprot.org/citations/24835996) target="_blank">24835996, PubMed: [30513302](http://www.uniprot.org/citations/30513302) target="_blank">30513302, PubMed: [32644293](http://www.uniprot.org/citations/32644293) target="_blank">32644293). 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 (PubMed: [23169781](http://www.uniprot.org/citations/23169781) target="_blank">23169781). Can act

either as a transcriptional repressor or a transcriptional activator depending on its interactions with other transcription factors, histone acetylases and deacetylases (PubMed:17377532, PubMed:21458306, PubMed:23947341, PubMed:24354325, PubMed:24722479). 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) (PubMed:17377532, PubMed:21458306, PubMed:23947341, PubMed:24354325, PubMed:24722479). 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 (PubMed:17360565). 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 (PubMed:18354202). Can repress the expression of IL2 and IFNG via its association with transcription factor IKZF4 (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:17360565, ECO:0000269|PubMed:18354202, ECO:0000269|PubMed:22678915, ECO:0000269|PubMed:23396208, ECO:0000269|PubMed:23973222, ECO:0000269|PubMed:23973223, ECO:0000269|PubMed:32644293}. Cytoplasm Note=Predominantly expressed in the cytoplasm in activated conventional T-cells whereas predominantly expressed in the nucleus in regulatory T- cells (Treg). The 41 kDa form derived by proteolytic processing is found exclusively in the chromatin fraction of activated Treg cells (By similarity). {ECO:0000250|UniProtKB:Q99JB6, ECO:0000269|PubMed:22678915}

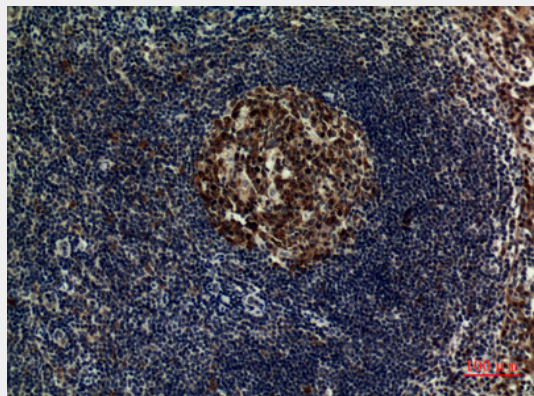
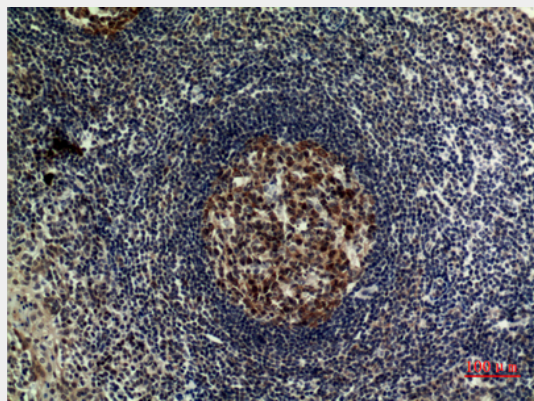
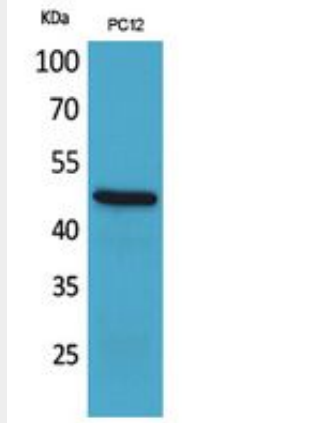
FOXP3 Polyclonal Antibody - Protocols

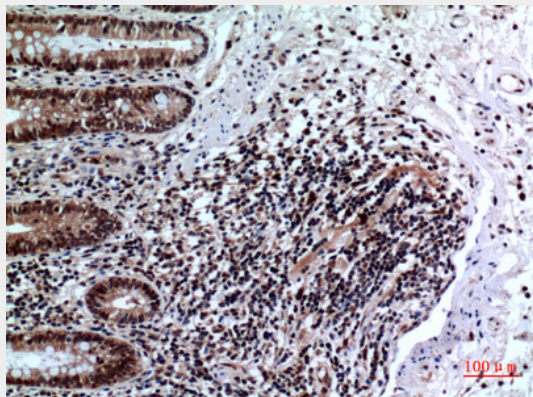
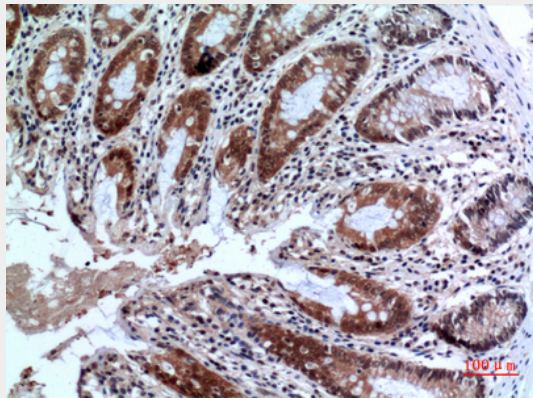
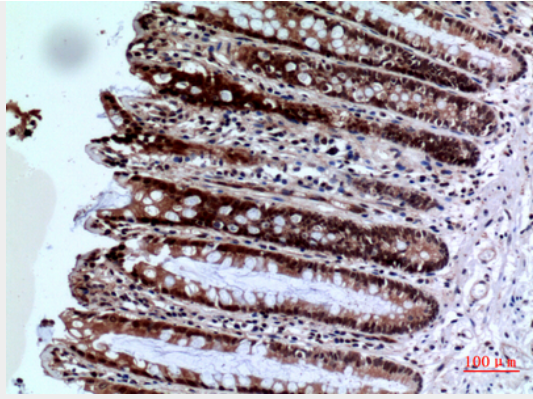
Provided below are standard protocols that you may find useful for product applications.

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

FOXP3 Polyclonal Antibody - Images







FOXP3 Polyclonal Antibody - Background

Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg). 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

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