

Product Name: FOXP3 (5I4) Rabbit Monoclonal Antibody
Catalog #: AMRe11115

Summary

Production Name	FOXP3 (5I4) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	FOXP3
Alternative Names	Forkhead box P3; Forkhead box protein P3; foxp3;
Gene ID	50943.0
SwissProt ID	Q9BZS1.

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	47kDa

Background

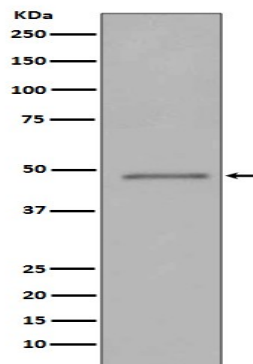
Defects in FOXP3 are the cause of immunodeficiency polyendocrinopathy, enteropathy, X-linked syndrome (IPEX) [MIM:304790]; also known as X-linked autoimmunity-immunodeficiency syndrome. IPEX is characterized by neonatal onset insulin-dependent diabetes mellitus, infections, secretory diarrhea, thrombocytopenia, anemia and eczema. It is usually lethal in infancy. Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg) (PubMed: [17377532](http://www.uniprot.org/citations/17377532)), PubMed: [21458306](http://www.uniprot.org/citations/21458306), PubMed: [30513302](http://www.uniprot.org/citations/30513302), PubMed: [23947341](http://www.uniprot.org/citations/23947341), PubMed: [24354325](http://www.uniprot.org/citations/24354325), PubMed: [24722479](http://www.uniprot.org/citations/24722479)). 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)). 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](http://www.uniprot.org/citations/17377532), PubMed: [21458306](http://www.uniprot.org/citations/21458306), PubMed: [23947341](http://www.uniprot.org/citations/23947341), PubMed: [24354325](http://www.uniprot.org/citations/24354325), PubMed: [24722479](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/17377532), PubMed: [21458306](http://www.uniprot.org/citations/21458306), PubMed: [23947341](http://www.uniprot.org/citations/23947341), PubMed: [24354325](http://www.uniprot.org/citations/24354325), PubMed: [24722479](http://www.uniprot.org/citations/24722479)). Inhibits cytokine production and T-cell effector function by repressing the activity of two key transcription factors, RELA and NFATC2 (PubMed: [15790681](http://www.uniprot.org/citations/15790681)). Mediates transcriptional repression of IL2 via its association with histone acetylase KAT5 and histone deacetylase HDAC7 (PubMed: [17360565](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/18368049))

Product Name: FOXP3 (5I4) Rabbit Monoclonal Antibody
Catalog #: AMRe11115

target="_blank">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).

Research Area

Image Data



Western blot analysis of FOXP3 expression in 293T cell lysate transfected with FOXP3.

Note

For research use only.