

Rabbit Foxp3 Polyclonal Antibody | anti-Foxp3 antibody

Phospho-Foxp3 (Ser19) Antibody

CATALOG # AAA329228	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry
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PRODUCT SYNONYMS

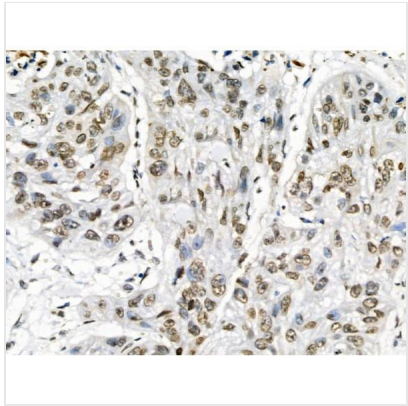
Foxp3; Polyclonal Antibody; Phospho-Foxp3 (Ser19) Antibody; AIID; DIETER; Forkhead box P3; Forkhead box protein P3; FOXP3; FOXP3_HUMAN; FOXP3delta7; Immune dysregulation polyendocrinopathy enteropathy X linked; Immunodeficiency polyendocrinopathy enteropathy X linked; IPEX; JM2; MGC141961; MGC141963; OTTHUMP00000025832; OTTHUMP00000025833; OTTHUMP00000226737; PIDX; Scurfin; XPID; anti-Foxp3 antibody

PRODUCT SPECIFICATIONS

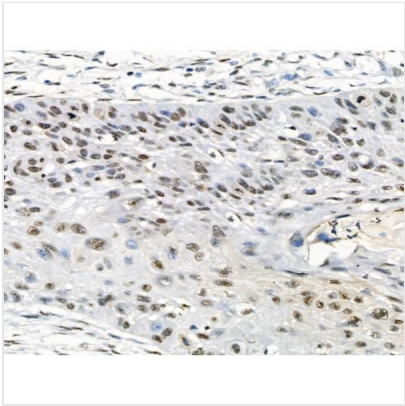
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Foxp3 (Ser19) Antibody detects endogenous levels of Foxp3 only when phosphorylated at Ser19.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-Foxp3 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human Foxp3 around the phosphorylation site of Ser19.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Polyubiquitinated, leading to its proteasomal degradation in regulatory T-cells (Treg) which is mediated by STUB1 in a HSPA1A/B-dependent manner. Deubiquitinated by USP7 leading to increase in protein stability. Phosphorylation at Ser-418 regulates its transcriptional repressor activity and consequently, regulatory T-cells (Treg) suppressive function. Dephosphorylated at Ser-418 by protein phosphatase 1 (PP1) in Treg cells derived from patients with rheumatoid arthritis. Phosphorylation by CDK2 negatively regulates its transcriptional activity and protein stability (By similarity). Acetylation on lysine residues stabilizes FOXP3 and promotes differentiation of T-cells into induced regulatory T-cells (iTregs) associated with suppressive functions. Deacetylated by SIRT1. Undergoes proteolytic cleavage in activated regulatory T-cells (Treg), and can be cleaved at either the N- or C-terminal site, or at both sites.
Subunit Structure	Homodimer. Dimerization is essential for its transcriptional regulator activity. Interacts with IKZF3. Isoform 1 (via LXXLL motif), but not isoform 2, interacts with isoform 4 of RORA (via AF-2 motif). Interacts with STUB1, HSPA8 and HSPA1A/B. Interacts with PPP1CA, PPP1CB and PPP1CG. Interacts with KAT5 and HDAC7. Interacts with HDAC9 in the absence of T-cell stimulation. Interacts with USP7. Interacts with isoform 2 of ZFP90 and can form a complex with TRIM28 in the presence of isoform 2 of ZFP90. Interacts with RUNX1. Interacts with RORC. Interacts with RELA and NFATC2. Interacts with RUNX2, RUNX3 and IKZF4 (By similarity).
Similarity	The fork-head DNA-binding domain is essential for its dimerization and interaction with NFATC2.

Subcellular Location	Nucleus. Cytoplasm. Note: Predominantly expressed in the cytoplasm in activated conventional T-cells whereas predominantly expressed in the nucleus in regulatory T-cells (Treg). The 41kDa form derived by proteolytic processing is found exclusively in the chromatin fraction of activated Treg cells (By similarity).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

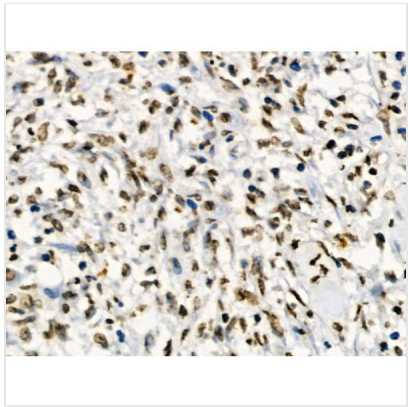
IMAGES



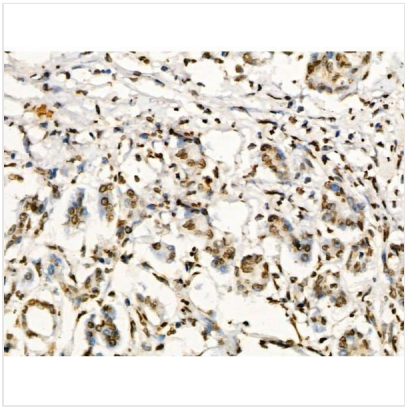
IHC (Immunohistochemistry)
At 1/100 staining Human esophageal cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemisry)
At 1/100 staining Human esophageal cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)
Staining Human pancreatic cancer and adjacent nomal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/100 staining Human pancreatic cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-Foxp3 antibody	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. Mediates transcriptional repression of IL2 via its association with histone acetylase KAT5 and histone deacetylase HDAC7. Can activate the expression of TNFRSF18, IL2RA and CTLA4 and repress the expression of IL2 and IFNG via its association with transcription factor RUNX1. Inhibits the differentiation of IL17 producing helper T-cells (Th17) by antagonizing RORC function, leading to down-regulation of IL17 expression, favoring Treg development. Inhibits the transcriptional activator activity of RORA. Can repress the expression of IL2 and IFNG via its association with transcription factor IKZF4 (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	167466190
NCBI GeneID	50943
NCBI Accession #	NP_001107849.1
NCBI GenBank Nucleotide #	NM_001114377.1
UniProt Accession #	Q9BZS1; O60827; Q14DD8; Q4ZH51; A5HJT1; B7ZLG0
Molecular Weight	47,244 Da
NCBI Official Full Name	forkhead box protein P3 isoform b
NCBI Official Synonym Full Names	forkhead box P3
NCBI Official Symbol	FOXP3
NCBI Official Synonym Symbols	JM2; AIID; IPEX; PIDX; XPID; DIETER
NCBI Protein Information	forkhead box protein P3; scurf; FOXP3delta7; immunodeficiency, polyendocrinopathy, enteropathy, X-linked; immune dysregulation, polyendocrinopathy, enteropathy, X-linked
UniProt Protein Name	Forkhead box protein P3
UniProt Gene Name	FOXP3
UniProt Synonym Gene Names	IPEX
UniProt Entry Name	FOXP3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/foxp3-antibody-peptide-elisa-immunohistochemistry-elisa/329228>