

FOXP1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9849b

Product Information

Application Primary Accession Other Accession Reactivity Predicted Host	IHC-P, FC, WB, E <u>Q9H334</u> <u>Q498D1, P58462, A4IFD2</u> Human Bovine, Mouse, Rat Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	75317
Antigen Region	650-677

Additional Information

Gene ID	27086
Other Names	Forkhead box protein P1, Mac-1-regulated forkhead, MFH, FOXP1
Target/Specificity	This FOXP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 650-677 amino acids from the C-terminal region of human FOXP1.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FOXP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FOXP1
Function	Transcriptional repressor (PubMed: <u>18347093</u> , PubMed: <u>26647308</u>). Can act with CTBP1 to synergistically repress transcription but CTPBP1 is not essential (By similarity). Plays an important role in the specification and differentiation

	of lung epithelium. Acts cooperatively with FOXP4 to regulate lung secretory epithelial cell fate and regeneration by restricting the goblet cell lineage program; the function may involve regulation of AGR2. Essential transcriptional regulator of B-cell development. Involved in regulation of cardiac muscle cell proliferation. Involved in the columnar organization of spinal motor neurons. Promotes the formation of the lateral motor neuron column (LMC) and the preganglionic motor column (PGC) and is required for respective appropriate motor axon projections. The segment-appropriate generation of spinal cord motor columns requires cooperation with other Hox proteins. Can regulate PITX3 promoter activity; may promote midbrain identity in embryonic stem cell-derived dopamine neurons by regulating PITX3. Negatively regulates the differentiation of T follicular helper cells T(FH)s. Involved in maintenance of hair follicle stem cell quiescence; the function probably involves regulation of FGF18 (By similarity). Represses transcription of various pro-apoptotic genes and cooperates with NF- kappa B-signaling in promoting B-cell expansion by inhibition of caspase-dependent apoptosis (PubMed:25267198). Binds to CSF1R promoter elements and is involved in regulation of monocyte differentiation and macrophage functions; repression of CSF1R in monocytes seems to involve NCOR2 as corepressor (PubMed:15286807, PubMed:18347093, PubMed:18799727). Involved in endothelial cell proliferation, tube formation and migration indicative for a role in angiogenesis; the role in neovascularization seems to implicate suppression of SEMA5B (PubMed:24023716). Can negatively regulate androgen receptor signaling (PubMed:18640093). Acts as a transcriptional activator of the FBXL7 promoter; this activity is regulated by AURKA (PubMed:28218735).
Cellular Location	Nucleus. Note=Not found in the nucleolus
Tissue Location	Isoform 8 is specifically expressed in embryonic stem cells.

Background

This gene belongs to subfamily P of the forkhead box (FOX) transcription factor family. Forkhead box transcription factors play important roles in the regulation of tissue- and cell type-specific gene transcription during both development and adulthood. Forkhead box P1 protein contains both DNA-binding- and protein-protein binding-domains. This gene may act as a tumor suppressor as it is lost in several tumor types and maps to a chromosomal region (3p14.1) reported to contain a tumor suppressor gene(s).

References

Johansson, A., et al. Obesity (Silver Spring) 18(4):803-808(2010) Baro, C., et al. Histol. Histopathol. 24(11):1399-1404(2009) Rayoo, M., et al. J. Clin. Pathol. 62(10):896-902(2009) Courts, C., et al. J. Neuropathol. Exp. Neurol. 68(9):972-976(2009)

Images

Immunohistochemical analysis of paraffin-embedded H. thymus section using FOXP1 Antibody (C-term)(Cat#AP9849b). AP9849b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



FOXP1 Antibody (C-term) (Cat. #AP9849b) western blot analysis in A549,Daudi,Jurkat,MCF-7,NCI-H292 cell line lysates (35ug/lane).This demonstrates the FOXP1 antibody detected the FOXP1 protein (arrow).

FOXP1 Antibody (C-term) (Cat. #AP9849b) IHC analysis in formalin fixed and paraffin embedded lung tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the FOXP1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

FOXP1 Antibody (C-term) (Cat. #AP9849b) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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