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FOXP1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1761a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q9H334
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6E4
Isotype	IgG1
Calculated MW	75317
Description	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). Alternative splicing results in multiple transcript variants encoding different isoforms.
Immunogen	Purified recombinant fragment of human FOXP1 (AA: 481-677) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	27086
Other Names	Forkhead box protein P1, Mac-1-regulated forkhead, MFH, FOXP1
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FOXP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FOXP1

Function	Transcriptional repressor (PubMed: 18347093, PubMed:26647308). 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.

References

1.PLoS One. 2011;6(5):e20475.2.Immunol Lett. 2011 May;136(2):156-62.

Images

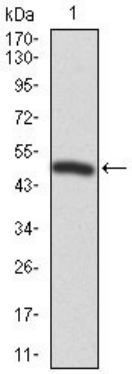
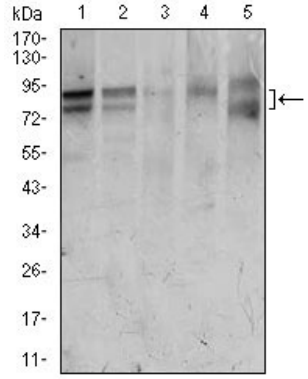


Figure 1: Western blot analysis using FOXP1 mAb against human FOXP1 recombinant protein. (Expected MW is 47.7 kDa)

Figure 2: Western blot analysis using FOXP1 mouse mAb against HeLa (1), Jurkat (2), MCF-7 (3), T47D (4), and Raw264.7 (5) cell lysate.



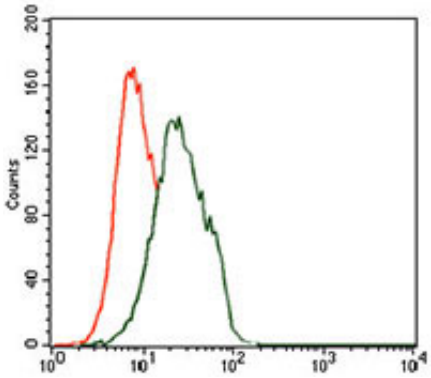


Figure 3: Flow cytometric analysis of Jurkat cells using FOXP1 mouse mAb (green) and negative control (red).

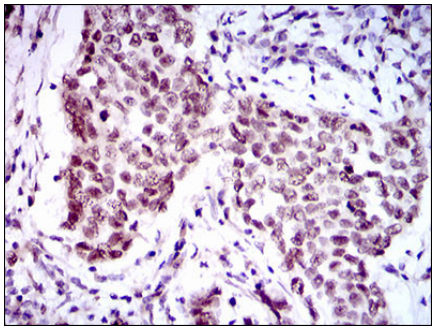


Figure 4: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using FOXP1 mouse mAb with DAB staining.

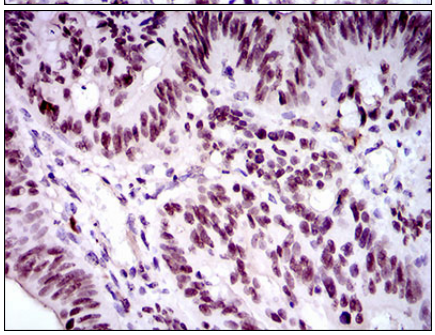


Figure 5: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using FOXP1 mouse mAb with DAB staining.

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