

FOXP1 Antibody

Purified Mouse Monoclonal Antibody Catalog # A01761a

Specification

FOXP1 Antibody - Product Information

Application E, WB, FC, IHC

Primary Accession

Reactivity

Host

Clonality

Isotype

Monoclonal

IgG1

Calculated MW 75.3kDa KDa

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

FOXP1 Antibody - Additional Information

Gene ID 27086

Other Names

Forkhead box protein P1, Mac-1-regulated forkhead, MFH, FOXP1

Dilution

E~~1/10000 WB~~1/500 - 1/2000 FC~~1/200 - 1/400 IHC~~1/200 - 1/1000

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.



FOXP1 Antibody - 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

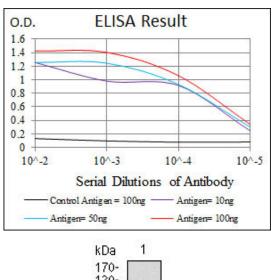
Isoform 8 is specifically expressed in embryonic stem cells.

FOXP1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture





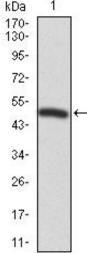


Figure 1: Western blot analysis using FOXP1 mAb against human FOXP1 recombinant protein. (Expected MW is 47.7 kDa)

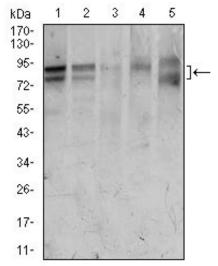


Figure 2: Western blot analysis using FOXP1 mouse mAb against HeLa (1), Jurkat (2), MCF-7 (3), T47D (4), and Raw264.7 (5) cell lysate.



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

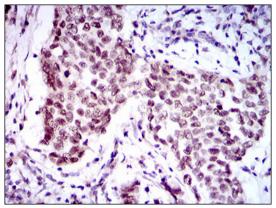


Figure 4: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using FOXP1 mouse mAb with DAB staining.

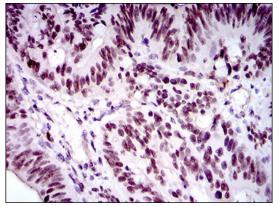


Figure 5: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using FOXP1 mouse mAb with DAB staining.

FOXP1 Antibody - References

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