

FoxP1 Rabbit pAb

FoxP1 Rabbit pAb Catalog # AP94414

Product Information

Application IF, ICC
Primary Accession P58462
Reactivity Mouse
Host Rabbit
Clonality Polyclonal
Calculated MW 78833
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from mouse FoxP1

Epitope Specificity 581-705/705

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus.

SIMILARITY Contains 1 C2H2-type zinc finger.Contains 1 fork-head DNA-binding domain. **SUBUNIT** Forms homodimers and heterodimers with FOXP2 and FOXP4. Dimerization is

required for DNA-binding. Interacts with CTBP1.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions 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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID 108655

Other Names Forkhead box protein P1, Forkhead-related transcription factor 1, Foxp1

Target/Specificity Highest expression in the lung, brain, and spleen. Lower expression in heart,

skeletal muscle, kidney, small intestine (isoform 3 not present) and liver.

Dilution ICC/IF=1:50,Flow-Cyt=1 □g/Test

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

Foxp1

Function

Transcriptional repressor. Can act with CTBP1 to synergistically repress transcription but CTPBP1 is not essential (PubMed: 11358962, PubMed: 14701752). 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 (PubMed:11358962, PubMed:22675208). Essential transcriptional regulator of B-cell development (PubMed: 16819554). Involved in regulation of cardiac muscle cell proliferation (PubMed: 20713518). 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 (PubMed: 18662545, PubMed: 18667151). Can regulate PITX3 promoter activity; may promote midbrain identity in embryonic stem cell-derived dopamine neurons by regulating PITX3 (PubMed: <u>20175877</u>). Negatively regulates the differentiation of T follicular helper cells T(FH)s (PubMed:24859450). Involved in maintenance of hair follicle stem cell quiescence; the function probably involves regulation of FGF18 (PubMed: <u>23946441</u>). 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. 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. 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. Can negatively regulate androgen receptor signaling (By similarity). Acts as a transcriptional activator of the FBXL7 promoter; this activity is regulated by AURKA (By similarity).

Cellular Location

Nucleus {ECO:0000250 | UniProtKB:Q9H334}. Note=Not found in the nucleolus. {ECO:0000250 | UniProtKB:Q9H334}

Tissue Location

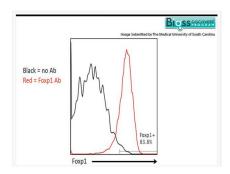
Isoform 5 is specifically expressed in embryonic stem cells (PubMed:21924763). Highest expression in the lung, brain, and spleen. Lower expression in heart, skeletal muscle, kidney, small intestine (isoform 3 not

present) and liver

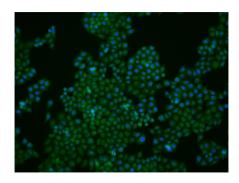
Background

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Images



ANTI-FOXP1 POLYCLONAL ANTIBODY, CONJUGATED (AP94414-A647). Accuri C6 flow cytometer was used for data acquisition



MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (FoxP1) polyclonal Antibody, Unconjugated (AP94414) 1:25, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.