

Anti-FOXP1 Antibody

Catalog # ABO10907

#### Specification

# Anti-FOXP1 Antibody - Product Information

ApplicationWB, IHC-PPrimary Accession09H334HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionPotection. Tested with WB,IHC-P in Human:Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-FOXP1 Antibody - Additional Information

Gene ID 27086

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

Calculated MW

while concomitantly repressing genes required for ESC differentiation. This isoform also promotes the maintenance of ESC pluripotency and contributes to efficient reprogramming of somatic cells into induced pluripotent stem cells. These results reveal a pivotal role for an Alternative splicing event in the regulation of pluripotency through the control of critical ESC-specific transcriptional programs(2)." KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization** |epigenetics and nuclear signaling|transcription|domain families|forkhead box| <br>epigenetics and nuclear signaling|foxp| <br>cancer|oncoproteins/suppressors|tumor suppressors

**Tissue Specificity** Forkhead box protein P1;Mac-1-regulated forkhead ;MFH ;FOXP1;HSPC215;

Source Forkhead box protein P1

Protein Name 75317 MW



Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human FOXP1(657-677aa HSPDFDHDRDYEDEPVNEDME), identical to the related rat and mouse sequences.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Nucleus .

## Anti-FOXP1 Antibody - Protein Information

Name FOXP1

#### Function

Transcriptional repressor (PubMed: <a href="http://www.uniprot.org/citations/18347093" target="\_blank">18347093</a>, PubMed:<a href="http://www.uniprot.org/citations/26647308" target=" blank">26647308</a>). 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:<a href="http://www.uniprot.org/citations/25267198" target=" blank">25267198</a>). 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:<a href="http://www.uniprot.org/citations/15286807" target=" blank">15286807</a>, PubMed:<a href="http://www.uniprot.org/citations/18347093" target="\_blank">18347093</a>, PubMed:<a href="http://www.uniprot.org/citations/18799727" target="\_blank">18799727</a>). 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:<a href="http://www.uniprot.org/citations/24023716" target=" blank">24023716</a>). Can negatively regulate androgen receptor signaling (PubMed: <a href="http://www.uniprot.org/citations/18640093" target=" blank">18640093</a>). Acts as a transcriptional activator of the FBXL7 promoter; this activity is regulated by AURKA (PubMed: <a



href="http://www.uniprot.org/citations/28218735" target="\_blank">28218735</a>).

Cellular Location Nucleus. Note=Not found in the nucleolus

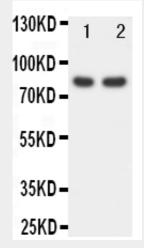
**Tissue Location** Isoform 8 is specifically expressed in embryonic stem cells.

# Anti-FOXP1 Antibody - Protocols

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

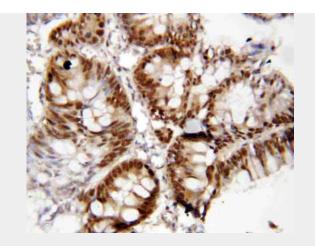
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-FOXP1 Antibody - Images



Anti-FOXP1 antibody, ABO10907, Western blottingLane 1: Rat Spleen Tissue LysateLane 2: COLO320 Cell Lysate





Anti-FOXP1 antibody, ABO10907, IHC(P)IHC(P): Human Rectal Cancer Tissue Anti-FOXP1 Antibody - Background

FOXP1(forkhead box P1") is a gene that is necessary for the proper development of the brain and lung in mammals. It is a member of the large FOX family of transcription factors. 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. It was shown that the embryonic stem cell(ESC)-specific isoform of FOXP1 stimulates the expression of transcription factor genes required for pluripotency