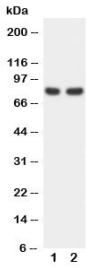
FOXP1 Antibody (R30671)

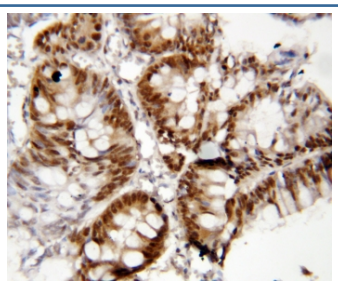
Catalog No.	Formulation	Size
R30671	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q9H334
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This FOXP1 antibody is available for research use only.



Western blot testing of FOXP1 antibody and Lane 1: rat spleen; 2: COLO320 cell lysate. Predicted/observed molecular weight: ~75 kDa.



IHC-P: FOXP1 antibody testing of human rectal cancer tissue. HIER: steamed with pH6 citrate buffer.

Description

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, including OCT4, NANOG, NR5A2, and GDF3, 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).

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the FOXP1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human FOXP1 (HSPDFDHDRDYEDEPVNEDME) was used as the immunogen for this FOXP1 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the FOXP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.