SANTA CRUZ BIOTECHNOLOGY, INC.

FOXP1 (P-20): sc-31731

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The FOX family of transcription factors is a large group of proteins that share a common DNA binding domain termed a winged-helix or forkhead domain. During early development, FOXP1 and FOXP2 are expressed abundantly in the lung, with lower levels of expression in neural, intestinal and cardiovascular tissues, where they act as transcription repressors. FOXP1 is widely expressed in adult tissues, while neoplastic cells often exhibit a dramatic change in expression level or localization of FOXP1. The gene encoding human FOXP1 maps to chromosome 3p14.1. The gene encoding human FOXP2 maps to chromosome 7q31. The gene encoding FOXP3, a third member of this family, maps to chromosome Xp11.23-Xq13.3. Mutations in this gene cause IPEX, a fatal, X-linked inherited disorder characterized by immune dysregulation. The FOXP3 protein, also known as scurfin, is essential for normal immune homeostasis. Specifically, FOXP3 represses transcription through a DNA binding forkhead domain, thereby regulating T cell activation.

REFERENCES

1. Lai, C.S., et al. 2000. The SPCH1 region on human 7q31: genomic characterization of the critical interval and localization of translocations associated with speech and language disorder. Am. J. Hum. Genet. 67: 357-368.
2. Banham, A.H., et al. 2001. The FOXP1 winged helix transcription factor is a novel candidate tumor suppressor gene on chromosome 3p. Cancer Res. 61: 8820-8829.
3. Bennett, C.L., et al. 2001. The immune dysregulation, polyendocrinopathy, enteropathy, X-linked syndrome (IPEX) is caused by mutations of FOXP3. Nat. Genet. 27: 20-21.

CHROMOSOMAL LOCATION

Genetic locus: FOXP1 (human) mapping to 3p13; Foxp1 (mouse) mapping to 6 D3.

SOURCE

FOXP1 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FOXP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-31731 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-31731 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

FOXP1 (P-20) is recommended for detection of FOXP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FOXP1 (P-20) is also recommended for detection of FOXP1 in additional species, including equine, canine, bovine, porcine and avian.

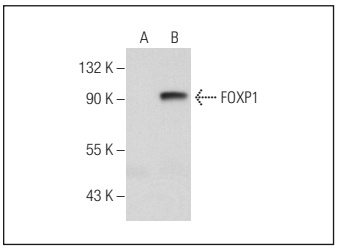
Suitable for use as control antibody for FOXP1 siRNA (h): sc-44583, FOXP1 siRNA (m): sc-44584, FOXP1 shRNA Plasmid (h): sc-44583-SH, FOXP1 shRNA Plasmid (m): sc-44584-SH, FOXP1 shRNA (h) Lentiviral Particles: sc-44583-V and FOXP1 shRNA (m) Lentiviral Particles: sc-44584-V.

FOXP1 (P-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of FOXP1: 85 kDa.

Positive Controls: FOXP1 (m): 293T Lysate: sc-120311.

DATA



FOXP1 (P-20): sc-31731. Western blot analysis of FOXP1 expression in non-transfected: sc-117752 (**A**) and mouse FOXP1 transfected: sc-120311 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Takayama, K., et al. 2008. FOXP1 is an androgen-responsive transcription factor that negatively regulates androgen receptor signaling in prostate cancer cells. Biochem. Biophys. Res. Commun. 374: 388-393.
2. Feng, X., et al. 2010. FOXP1 is an essential transcriptional regulator for the generation of quiescent naive T cells during thymocyte development. Blood 115: 510-518.