

FOXP4 (D-8): sc-390892

BACKGROUND

The forkhead box (FOX) family of transcription factors represent a group of proteins that share a common FOX DNA-binding domain and play important roles in cell- and tissue-specific protein expression during development. The FOX family is divided into subfamilies, one of which is subfamily P. FOXP4 (forkhead box protein P4), also known as FKHLA (fork head-related protein-like A), is a 680 amino acid nuclear protein that belongs to the P subfamily of FOX proteins and contains one C₂H₂-type zinc finger and one FOX DNA-binding domain. Functioning as a transcriptional repressor, FOXP4 exists as either homodimers or heterodimers with FOXP1 and FOXP2 and plays a role in the repression of lung-specific protein expression. FOXP4 is thought to participate in mammalian oncogenesis, specifically in the development of kidney and larynx tumors. Multiple isoforms of FOXP4 exist due to alternative splicing events.

REFERENCES

- Lu, M.M., et al. 2002. FOXP4: a novel member of the FOXP subfamily of winged-helix genes co-expressed with FOXP1 and FOXP2 in pulmonary and gut tissues. *Gene Expr. Patterns* 2: 223-228.
- Lu, M.M., et al. 2002. FOXP4: a novel member of the FOXP subfamily of winged-helix genes co-expressed with FOXP1 and FOXP2 in pulmonary and gut tissues. *Mech. Dev.* 1: S197-S202.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608924. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Teufel, A., et al. 2003. FOXP4, a novel forkhead transcription factor. *Biochim. Biophys. Acta* 1627: 147-152.
- Katoh, M. and Katoh, M. 2004. Human FOX gene family (Review). *Int. J. Oncol.* 25: 1495-1500.

CHROMOSOMAL LOCATION

Genetic locus: FOXP4 (human) mapping to 6p21.1; Foxp4 (mouse) mapping to 17 C.

SOURCE

FOXP4 (D-8) is a mouse monoclonal antibody raised against amino acids 576-680 mapping at the C-terminus of FOXP4 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FOXP4 (D-8) is available conjugated to agarose (sc-390892 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390892 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390892 PE), fluorescein (sc-390892 FITC), Alexa Fluor® 488 (sc-390892 AF488), Alexa Fluor® 546 (sc-390892 AF546), Alexa Fluor® 594 (sc-390892 AF594) or Alexa Fluor® 647 (sc-390892 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390892 AF680) or Alexa Fluor® 790 (sc-390892 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

FOXP4 (D-8) is recommended for detection of FOXP4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for FOXP4 siRNA (h): sc-105372, FOXP4 siRNA (m): sc-145228, FOXP4 shRNA Plasmid (h): sc-105372-SH, FOXP4 shRNA Plasmid (m): sc-145228-SH, FOXP4 shRNA (h) Lentiviral Particles: sc-105372-V and FOXP4 shRNA (m) Lentiviral Particles: sc-145228-V.

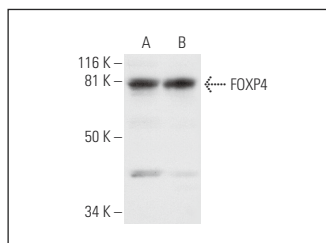
Molecular Weight of FOXP4: 73 kDa.

Positive Controls: FOXP4 (h): 293T Lysate: sc-115829, HeLa whole cell lysate: sc-2200 or Raji whole cell lysate: sc-364236.

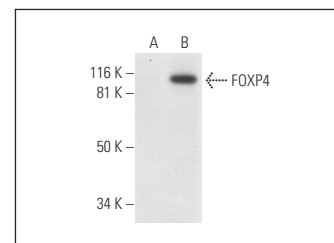
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FOXP4 (D-8): sc-390892. Western blot analysis of FOXP4 expression in Raji (A) and HeLa (B) whole cell lysates.



FOXP4 (D-8): sc-390892. Western blot analysis of FOXP4 expression in non-transfected: sc-117752 (A) and human FOXP4 transfected: sc-115829 (B) 293T whole cell lysates.

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.

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