

FOXP4 (h): 293T Lysate: sc-115829

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

1. 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.
2. 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.
3. 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/>
4. Teufel, A., et al. 2003. FOXP4, a novel forkhead transcription factor. *Biochim. Biophys. Acta* 1627: 147-152.
5. Katoh, M. and Katoh, M. 2004. Human FOX gene family (Review). *Int. J. Oncol.* 25: 1495-1500.
6. Li, S., et al. 2004. Transcriptional and DNA binding activity of the Foxp1/2/4 family is modulated by heterotypic and homotypic protein interactions. *Mol. Cell. Biol.* 24: 809-822.
7. Hannehalli, S., et al. 2006. Transcriptional genomics associates FOX transcription factors with human heart failure. *Circulation* 114: 1269-1276.

CHROMOSOMAL LOCATION

Genetic locus: FOXP4 (human) mapping to 6p21.1.

PRODUCT

FOXP4 (h): 293T Lysate represents a lysate of human FOXP4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

FOXP4 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FOXP4 antibodies. Recommended use: 10-20 µl per lane.

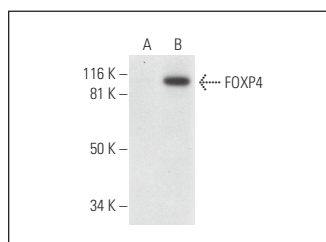
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FOXP4 (D-8): sc-390892 is recommended as a positive control antibody for Western Blot analysis of enhanced human FOXP4 expression in FOXP4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



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.

RESEARCH USE

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