

## FOXP4 (m): 293T Lysate: sc-120312

### 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 (forkhead-related protein-like A), is a 680 amino acid nuclear protein that belongs to the P subfamily of FOX proteins and contains one C<sub>2</sub>H<sub>2</sub>-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.* 119: 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. *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. Hannenhalli, S., et al. 2006. Transcriptional genomics associates FOX transcription factors with human heart failure. *Circulation* 114: 1269-1276.
8. Takahashi, K., et al. 2008. Expression of FOXP4 in the developing and adult rat forebrain. *J. Neurosci. Res.* 86: 3106-3116.

### CHROMOSOMAL LOCATION

Genetic locus: Foxp4 (mouse) mapping to 17 C.

### PRODUCT

FOXP4 (m): 293T Lysate represents a lysate of mouse 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.

### APPLICATIONS

FOXP4 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse 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.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.