

FOXJ1 (h): 293T Lysate: sc-115631

BACKGROUND

Forkhead-box J1 (FOXJ1) is a 421-amino acid transcription factor that suppresses T cell activity and thus spontaneous autoimmunity, through the repression of NF κ B activity. FOXJ1 also inhibits the humoral immune response in B cells; FOXJ1 deficiency in B cells results in spontaneous and accentuated germinal center formation, implicated in the development of pathogenic autoantibodies and accentuated responses to immunizations. Abnormal expression of FOXJ1 may be associated with autoimmune diseases and/or other inflammatory diseases. FOXJ1 is also required for cilia formation and left-right axis determination because it increases calpastatin expression, a protein necessary for the ability of basal bodies to anchor to the apical cytoskeleton. FOXJ1 expression may function as an early marker of epithelial cell differentiation, recovery, and function.

REFERENCES

1. Look, D.C., et al. 2001. Effects of paramyxoviral infection on airway epithelial cell FOXJ1 expression, ciliogenesis, and mucociliary function. *Am. J. Pathol.* 159: 2055-2069.
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3. Huang, T., et al. 2003. FOXJ1 is required for apical localization of ezrin in airway epithelial cells. *J. Cell Sci.* 116: 4935-4945.
4. Gomperts, B.N., et al. 2004. FOXJ1 regulates basal body anchoring to the cytoskeleton of ciliated pulmonary epithelial cells. *J. Cell Sci.* 117: 1329-1337.
5. Zhang, M., et al. 2004. FOXJ1 regulates asymmetric gene expression during left-right axis patterning in mice. *Biochem. Biophys. Res. Commun.* 324: 1413-1420.
6. Lin, L., et al. 2005. Restraint of B cell activation by FOXJ1-mediated antagonism of NF κ B and IL-6. *J. Immunol.* 175: 951-958.
7. Srivatsan, S., et al. 2005. Cutting edge: FOXJ1 protects against autoimmunity and inhibits thymocyte egress. *J. Immunol.* 175: 7805-7809.
8. Tamakoshi, T., et al. 2005. Roles of the FOXJ1 and Inv genes in the left-right determination of internal organs in mice. *Biochem. Biophys. Res. Commun.* 339: 932-938.

CHROMOSOMAL LOCATION

Genetic locus: FOXJ1 (human) mapping to 17q25.1.

PRODUCT

FOXJ1 (h): 293T Lysate represents a lysate of human FOXJ1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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

FOXJ1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FOXJ1 antibodies. Recommended use: 10-20 μ l per lane.

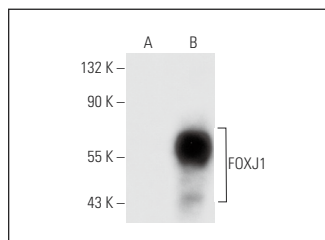
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FOXJ1 (B-8): sc-365216 is recommended as a positive control antibody for Western Blot analysis of enhanced human FOXJ1 expression in FOXJ1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

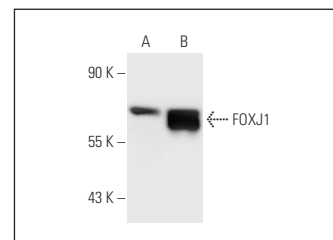
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



FOXJ1 (B-8): sc-365216. Western blot analysis of FOXJ1 expression in non-transfected: sc-117752 (A) and human FOXJ1 transfected: sc-115631 (B) 293T whole cell lysates.



FOXJ1 (3-19): sc-53139. Western blot analysis of FOXJ1 expression in non-transfected: sc-117752 (A) and human FOXJ1 transfected: sc-115631 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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