Forkhead-box J1 (FOXJ1) is a 421-amino acid transcription factor that suppresses T cell activity and thus spontaneous autoimmunity, through the repression of NFκB 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.

**APPLICATIONS**

FOXJ1 (3-19) is recommended for detection of FOXJ1 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for FOXJ1 siRNA (h): sc-62335, FOXJ1 siRNA (m): sc-62336, FOXJ1 shRNA Plasmid (h): sc-62335-SH, FOXJ1 shRNA Plasmid (m): sc-62335-SH, FOXJ1 shRNA (h) Lentiviral Particles: sc-62335-V and FOXJ1 shRNA (m) Lentiviral Particles: sc-62336-V.

Molecular Weight of FOXJ1: 58 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or WI-38 whole cell lysate: sc-364260.

**CHROMOSOMAL LOCATION**

Genetic locus: FOXJ1 (human) mapping to 17q25.1; Foxj1 (mouse) mapping to 109K–110K.

**SOURCE**

FOXJ1 (3-19) is a mouse monoclonal antibody raised against recombinant FOXJ1 of rat origin.

**PRODUCT**

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

FOXJ1 (3-19) is available conjugated to agarose (sc-53139 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53139 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53139 PE), fluorescein (sc-53139 FITC), or Alexa Fluor® 488 (sc-53139 AF488), Alexa Fluor® 546 (sc-53139 AF546), Alexa Fluor® 594 (sc-53139 AF594) or Alexa Fluor® 647 (sc-53139 AF647), 200 µg/ml, for WB (RGB), IF, HCIP and FCM; and to either Alexa Fluor® 680 (sc-53139 AF680) or Alexa Fluor® 790 (sc-53139 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**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 NFκB 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.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**SELECT PRODUCT CITATIONS**


**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.

**PROTOCOLS**

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