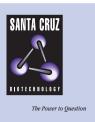
SANTA CRUZ BIOTECHNOLOGY, INC.

FOXD2 (N-13): sc-48008



BACKGROUND

The FOX family of transcription factors share a common DIUA binding domain termed a winged-helix or forkhead domain. Many FOX proteins play important roles in development, metabolism, cancer and aging. FOXD1 (also designated brain factor 2 or BF-2) is involved in regulating inflammation as well as kidney and retinal development. FOXD1 regulates the activity of NFAT and NF κ B. Deficiency of FOXD1 results in multiorgan, systemic inflammation, exaggerated Th cell-derived cytokine production and T cell proliferation in autogolgous MLRs. In kidneys, FOXD1 controls the production of signals required for the normal transition of induced mesenchyme into tubular epithelium and full growth and branching of the collecting system. Deletion of FOXD1 results in renal abnormalities. FOXD2 acts as a modulator of T cell activation.

REFERENCES

- Hatini, V., Huh, S.O., Herzlinger, D., Soares, V.C. and Lai, E. 1996. Essential role of stromal mesenchyme in kidney morphogenesis revealed by targeted disruption of winged helix transcription factor BF-2. Genes Dev. 10: 1467-1478.
- Johansson, C.C., Dahle, M.K., Blomqvist, S.R., Grønning, L.M., Aandahl, E.M., Enerbäck, S. and Tasken, K. 2003. A winged helix forkhead (FOXD2) tunes sensitivity to cAMP in T through regulation of cAMP-dependent protein kinase RIα. J. Biol. Chem. 278: 17573-17579.
- Herrera, E., Marcus, R., Li, S., Williams, S.E., Erskine, L., Lai, E. and Mason, C. 2004. FOXD1 is required for proper formation of the optic chiasm. Development 131: 5727-5739.
- 4. Katoh, M. and Katoh, M. 2004. Human FOX gene family. Int. J. Oncol. 25: 1495-1500.
- Jonsson, H. and Peng, S.L. 2005. Forkhead transcription factors in immunology. Cell. Mol. Life Sci. 62: 397-409.
- Levinson, R.S., Batourina, E., Choi, C., Vorontchikhina, M., Kitajewski, J. and Mendelsohn, C.L. 2005. FOXD1-dependent signals control cellularity in the renal capsule, a structure required for normal renal development. Development 132: 529-539.
- Lin, L. and Peng, S.L. 2006. Coordination of NFκB and NFAT antagonism by the forkhead transcription factor FOXD1. J. Immunol. 176: 4793-4803.

CHROMOSOMAL LOCATION

Genetic locus: FOXD2 (human) mapping to 1p34-p32; Foxd2 (mouse) mapping to 4 D1.

SOURCE

FOXD2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FOXD2 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48008 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48008 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

FOXD2 (N-13) is recommended for detection of FOXD2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for FOXD2 siRNA (h): sc-60651 and FOXD2 siRNA (m): sc-60652.

FOXD2 (N-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of FOXD2: 49 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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