SANTA CRUZ BIOTECHNOLOGY, INC.

FOXE3 (h): 293T Lysate: sc-372347

BACKGROUND

The human forkhead-box (FOX) gene family consists of at least 43 members, including FOXE3, a 288-amino acid protein. FOXE3 is a winged-helix transcription factor that plays a crucial role during the initial stages of lens development and closure of the lens vesicle. FOXE3 may also act as a factor that promotes survival and proliferation while preventing differentiation in the lens epithelium. As the posterior cells of the lens fiber begin to differentiate, expression of FOXE3 is limited to the undifferentiated cells coating the anterior surface of the lens. Congenital primary aphakia (CPA) is a rare developmental disorder caused by a null mutation in the FOXE3 gene that is identified by the absence of a lens. The development of CPA is normally stimulated during the 4 or 15 week of human embryogenesis.

REFERENCES

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7. Medina-Martinez, O., Brownell, I., Amaya-Manzanares, F., Hu, Q., Behringer, R.R. and Jamrich, M. 2005. Severe defects in proliferation and differentiation of lens cells in FOXE3 null mice. Mol. Cell. Biol. 25: 8854-8863.
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CHROMOSOMAL LOCATION

Genetic locus: FOXE3 (human) mapping to 1p33.

PRODUCT

FOXE3 (h): 293T Lysate represents a lysate of human FOXE3 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

FOXE3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FOXE3 antibodies. Recommended use: 10-20 µl per lane.

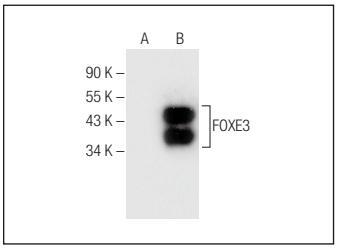
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FOXE3 (G-4): sc-377443 is recommended as a positive control antibody for Western Blot analysis of enhanced human FOXE3 expression in FOXE3 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



FOXE3 (G-4): sc-377443. Western blot analysis of FOXE3 expression in non-transfected: sc-117752 (**A**) and human FOXE3 transfected: sc-372347 (**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.