SANTA CRUZ BIOTECHNOLOGY, INC.

FANK1 (m): 293T Lysate: sc-126834

BACKGROUND

FANK1 (fibronectin type III and ankyrin repeat domains 1), also known as HSD13, is a 345 amino acid nuclear and cytoplasmic testis-specific protein found primarily in pachytene spermatocytes and round spermatids. Containing six ANK repeats and a single fibronectin type-III domain, FANK1 undergoes alternative splicing events to form three isoforms. Possessing DNA binding activity, FANK1 is suggested to act as a transcription factor and may regulate gene expression during spermatogenesis. The gene encoding FANK1 maps to human chromosome 10, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome.

REFERENCES

1. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
2. Zheng, Z., et al. 2007. Fank1 is a testis-specific gene encoding a nuclear protein exclusively expressed during the transition from the meiotic to the haploid phase of spermatogenesis. Gene Expr. Patterns 7: 777-783.
3. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611640. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Tremblay, K., et al. 2008. Genes to diseases (G2D) computational method to identify asthma candidate genes. PLoS ONE 3: e2907.
5. Trynka, G., et al. 2009. Coeliac disease-associated risk variants in TNFAIP3 and REL implicate altered NFκB signalling. Gut 58: 1078-1083.

CHROMOSOMAL LOCATION

Genetic locus: Fank1 (mouse) mapping to 7 F3.

PRODUCT

FANK1 (m): 293T Lysate represents a lysate of mouse FANK1 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

FANK1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FANK1 antibodies. Recommended use: 10-20 µl per lane.

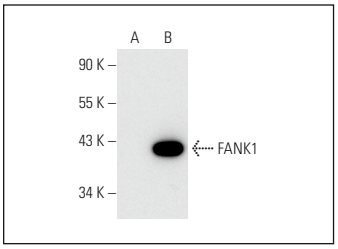
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FANK1 (E-5): sc-398057 is recommended as a positive control antibody for Western Blot analysis of enhanced human FANK1 expression in FANK1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

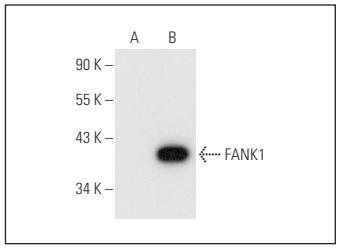
RECOMMENDED SUPPORT REAGENTS

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



FANK1 (E-5): sc-398057. Western blot analysis of FANK1 expression in non-transfected: sc-117752 (**A**) and mouse FANK1 transfected: sc-126834 (**B**) 293T whole cell lysates.



FANK1 (F-5): sc-398026. Western blot analysis of FANK1 expression in non-transfected: sc-117752 (**A**) and mouse FANK1 transfected: sc-126834 (**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.