SANTA CRUZ BIOTECHNOLOGY, INC.

FAM71B (P-14): sc-246744

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. It is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome. The FAM71B gene product has been provisionally designated FAM71B pending further characterization.

REFERENCES

1. Dixon, M.J., Read, A.P., Donnai, D., Colley, A., Dixon, J. and Williamson, R. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
2. Saltman, D.L., Dolganov, G.M., Warrington, J.A., Wasmuth, J.J. and Lovett, M. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. Genomics 16: 726-732.
3. Kadmon, M., Tandara, A. and Herfarth, C. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. Int. J. Colorectal Dis. 16: 63-75.
4. South, S.T., Swensen, J.J., Maxwell, T., Rope, A., Brothman, A.R. and Chen, Z. 2006. A new genomic mechanism leading to cri-du-chat syndrome. Am. J. Med. Genet. A 140: 2714-2720.
5. Aretz, S., Stienen, D., Friedrichs, N., Stemmler, S., Uhlhaas, S., Rahner, N., Propping, P. and Friedl, W. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). Hum. Mutat. 28: 985-992.
6. Cleaver, J.E., Hefner, E., Laposa, R.R., Karentz, D. and Marti, T. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. Neuroscience 145: 1300-1308.
7. Du, H.Y., Idol, R., Robledo, S., Ivanovich, J., An, P., Londono-Vallejo, A., Wilson, D.B., Mason, P.J. and Bessler, M. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. Aging Cell 6: 689-697.
8. Herry, A., Douet-Guilbert, N., Morel, F., Le Bris, M.J. and De Braekeleer, M. 2007. Redefining monosomy 5 by molecular cytogenetics in 23 patients with MDS/AML. Eur. J. Haematol. 78: 457-467.
9. Makrantonaki, E. and Zouboulis, C.C. 2007. Molecular mechanisms of skin aging: state of the art. Ann. N.Y. Acad. Sci. 1119: 40-50.

CHROMOSOMAL LOCATION

Genetic locus: FAM71B (human) mapping to 5q33.3; Fam71b (mouse) mapping to 11 B1.1.

RESEARCH USE

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

SOURCE

FAM71B (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAM71B of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-246744 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM71B (P-14) is recommended for detection of FAM71B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other FAM71 family members.

FAM71B (P-14) is also recommended for detection of FAM71B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FAM71B siRNA (h): sc-91781, FAM71B siRNA (m): sc-151470, FAM71B shRNA Plasmid (h): sc-91781-SH, FAM71B shRNA Plasmid (m): sc-151470-SH, FAM71B shRNA (h) Lentiviral Particles: sc-91781-V and FAM71B shRNA (m) Lentiviral Particles: sc-151470-V.

Molecular Weight of FAM71B: 68 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) Immunofluorescence: 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.

STORAGE

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

PROTOCOLS

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