FAM153A/B (F-6): sc-514616



The Power to Question

BACKGROUND

FAM153A, FAM153B and FAM153C are 310, 387 and 144 amino acid proteins, respectively, that are encoded by a genes mapping to human chromosome 5. 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.

REFERENCES

- 1. Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
- Saltman, D.L., et al. 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., et al. 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., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. Am. J. Med. Genet. A 140: 2714-2720.
- 5. Aretz, S., et al. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). Hum. Mutat. 28: 985-992.
- Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. Neuroscience 145: 1300-1308.
- Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. Aging Cell 6: 689-697.
- 8. Herry, A., et al. 2007. Redefining monosomy 5 by molecular cytogenetics in 23 patients with MDS/AML. Eur. J. Haematol. 78: 457-467.

CHROMOSOMAL LOCATION

Genetic locus: FAM153A (human) mapping to 5q35.3, FAM153B (human) mapping to 5q35.2.

SOURCE

FAM153A/B (F-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 36-59 near the N-terminus of FAM153A of human origin.

PRODUCT

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

APPLICATIONS

FAM153A/B (F-6) is recommended for detection of FAM153A and FAM153B of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

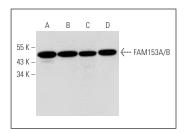
Molecular Weight of FAM153A/B isoforms: 35/44/17/13 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, SK-N-MC cell lysate: sc-2237 or ACHN whole cell lysate: sc-364365.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgM-HRP: sc-2064 (dilution range: 1:500-1:5,000), TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L PLUS-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgM-FITC: sc-2082 (dilution range: 1:100-1:400) or goat anti-mouse IgM-TR: sc-2983 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FAM153A/B (F-6): sc-514616. Western blot analysis of FAM153A/B expression in K-562 ($\bf A$), SK-N-MC ($\bf B$), Hep G2 ($\bf C$) and ACHN ($\bf D$) whole cell lysates.

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

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