SANTA CRUZ BIOTECHNOLOGY, INC.

MRNIP (H-11): sc-390012



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.

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.
- 2. 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.
- 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.
- Aretz, S., et al. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). Hum. Mutat. 28: 985-992.

CHROMOSOMAL LOCATION

Genetic locus: MRNIP (human) mapping to 5q35.3.

SOURCE

MRNIP (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 231-263 within an internal region of MRNIP of human origin.

PRODUCT

Each vial contains 200 μg lgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MRNIP (H-11) is available conjugated to agarose (sc-390012 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390012 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390012 PE), fluorescein (sc-390012 FITC), Alexa Fluor® 488 (sc-390012 AF488), Alexa Fluor® 546 (sc-390012 AF546), Alexa Fluor® 594 (sc-390012 AF594) or Alexa Fluor® 647 (sc-390012 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390012 AF680) or Alexa Fluor® 790 (sc-390012 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390012 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

MRNIP (H-11) is recommended for detection of MRNIP of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MRNIP siRNA (h): sc-91698, MRNIP shRNA Plasmid (h): sc-91698-SH and MRNIP shRNA (h) Lentiviral Particles: sc-91698-V.

Molecular Weight of MRNIP isoforms: 38/29 kDa.

Positive Controls: Daudi cell lysate: sc-2415, HeLa whole cell lysate: sc-2200 or AN3 CA cell lysate: sc-24662.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA





MRNIP (H-11): sc-390012. Western blot analysis of MRNIP expression in HeLa (\pmb{A}), AN3 CA (\pmb{B}) and Daudi (\pmb{C}) whole cell lysates.

MRNIP (H-11): sc-390012. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells and interstitial cells.

STORAGE

Store at 4° C, **D0 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.