SANTA CRUZ BIOTECHNOLOGY, INC.

MFAP3L (4): sc-101505



BACKGROUND

MFAP3L (microfibrillar-associated protein 3-like), also known as HSD39 or testis development protein NYD-SP9, is a 409 amino acid single-pass type I cell membrane protein that contains one Ig-like (immunoglobulin-like) domain. Found primarily in testis, MFAP3L is encoded by a gene that is located on chromosome 4 and is expressed as three isoforms due to alternative splicing events. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes, one of which is the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease. FGFR-3 is also encoded on chromosome 4 and has been associated with than-atophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

- 1. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Nature 434: 724-731.
- Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. Curr. Top. Dev. Biol. 75: 25-71.
- Chandler, R.J., et al. 2007. Metabolic phenotype of methylmalonic acidemia in mice and humans: the role of skeletal muscle. BMC Med. Genet. 8: 64.
- Cunningham, M.L., et al. 2007. Syndromic craniosynostosis: from history to hydrogen bonds. Orthod. Craniofac. Res. 10: 67-81.
- 5. Versteegh, F.G., et al. 2007. Growth hormone analysis and treatment in Ellis-van Creveld syndrome. Am. J. Med. Genet. A 143A: 2113-2121.
- Doherty, E.S., et al. 2007. Muenke syndrome (FGFR3-related craniosynostosis): expansion of the phenotype and review of the literature. Am. J. Med. Genet. A 143A: 3204-3215.
- Ruiz-Perez, V.L., et al. 2007. Evc is a positive mediator of lhh-regulated bone growth that localises at the base of chondrocyte cilia. Development 134: 2903-2912.
- Stack, E.C., et al. 2007. Neuroprotective effects of synaptic modulation in Huntington's disease R6/2 mice. J. Neurosci. 27: 12908-12915.
- Kang, B., et al. 2008. Evaluation of hepatic-metastasis risk of colorectal cancer upon the protein signature of PI3K/Akt pathway. J. Proteome Res. 7: 3507-3515.

CHROMOSOMAL LOCATION

Genetic locus: MFAP3L (human) mapping to 4q33.

SOURCE

MFAP3L (4) is a mouse monoclonal antibody raised against recombinant MFAP3L of human origin.

PRODUCT

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

APPLICATIONS

MFAP3L (4) is recommended for detection of MFAP3L of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MFAP3L siRNA (h): sc-88992, MFAP3L shRNA Plasmid (h): sc-88992-SH and MFAP3L shRNA (h) Lentiviral Particles: sc-88992-V.

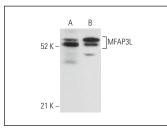
Molecular Weight of MFAP3L: 45 kDa.

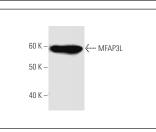
Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA





MFAP3L (4): sc-101505. Western blot analysis of MFAP3L expression in NTERA-2 cl.D1 (A) and HeLa (B) whole cell lysates. MFAP3L (4): sc-101505. Western blot analysis of human recombinant MFAP3L.

SELECT PRODUCT CITATIONS

 Ye, J., et al. 2022. MicroRNA-671-5p inhibits cell proliferation, migration and invasion in non-small cell lung cancer by targeting MFAP3L. Mol. Med. Rep. 25: 30.

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 for detailed protocols and support products.