MFAP3L (C-10): sc-390228



The Power to Question

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 thanatophoric 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.
- 2. Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. Curr. Top. Dev. Biol. 75: 25-71.
- 3. 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.

CHROMOSOMAL LOCATION

Genetic locus: MFAP3L (human) mapping to 4q33; Mfap3l (mouse) mapping to 8 B3.1.

SOURCE

MFAP3L (C-10) is a mouse monoclonal antibody raised against amino acids 246-409 mapping at the C-terminus of MFAP3L of human origin.

PRODUCT

Each vial contains 200 $\mu g \ lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MFAP3L (C-10) is available conjugated to agarose (sc-390228 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390228 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390228 PE), fluorescein (sc-390228 FITC), Alexa Fluor* 488 (sc-390228 AF488), Alexa Fluor* 546 (sc-390228 AF546), Alexa Fluor* 594 (sc-390228 AF594) or Alexa Fluor* 647 (sc-390228 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-390228 AF680) or Alexa Fluor* 790 (sc-390228 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

MFAP3L (C-10) is recommended for detection of MFAP3L isoforms 1 and 2 of mouse, rat and 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).

Suitable for use as control antibody for MFAP3L siRNA (h): sc-88992, MFAP3L siRNA (m): sc-149402, MFAP3L shRNA Plasmid (h): sc-88992-SH, MFAP3L shRNA Plasmid (m): sc-149402-SH, MFAP3L shRNA (h) Lentiviral Particles: sc-88992-V and MFAP3L shRNA (m) Lentiviral Particles: sc-149402-V.

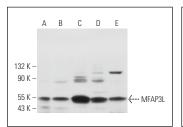
Molecular Weight of MFAP3L: 45 kDa.

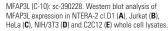
Positive Controls: human testis extract: sc-363781, HeLa whole cell lysate: sc-2200 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

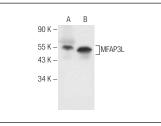
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG 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-lgG κ BP-FITC: sc-516140 or m-lgG 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.

DATA







MFAP3L (C-10): sc-390228. Western blot analysis of MFAP3L expression in human testis tissue extract (A) and NTERA-2 cl.D1 whole cell lysate (B).

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.