

FSD2 (H-11): sc-393072



The Power to Question

BACKGROUND

FSD2 (Fibronectin type III and SPRY domain-containing protein 2), also known as SPRYD1 (SPRY domain-containing protein 1), is a 749 amino acid protein containing one B30.2/SPRY domain and two Fibronectin type-III domains. The gene encoding FSD2 maps to human chromosome 15q25.2. Encoding more than 700 genes, chromosome 15 is made up of approximately 106 million base pairs and consists of about 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11-q13 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are also associated with chromosome 15.

REFERENCES

1. Cachón-González, M.B., et al. 2006. Effective gene therapy in an authentic model of Tay-Sachs-related diseases. *Proc. Natl. Acad. Sci. USA* 103: 10373-10378.
2. Zody, M.C., et al. 2006. Analysis of the DNA sequence and duplication history of human chromosome 15. *Nature* 440: 671-675.
3. Diene, G., et al. 2007. The Prader-Willi syndrome. *Ann. Endocrinol.* 68: 129-137.
4. Lalonde, M. and Calciano, M.A. 2007. Molecular epigenetics of Angelman syndrome. *Cell. Mol. Life Sci.* 64: 947-960.
5. Maegawa, G.H., et al. 2007. Pyrimethamine as a potential pharmacological chaperone for late-onset forms of GM2 gangliosidosis. *J. Biol. Chem.* 282: 9150-9161.

CHROMOSOMAL LOCATION

Genetic locus: FSD2 (human) mapping to 15q25.2; Fsd2 (mouse) mapping to 7 D3.

SOURCE

FSD2 (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 22-45 near the N-terminus of FSD2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FSD2 (H-11) is available conjugated to agarose (sc-393072 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393072 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393072 PE), fluorescein (sc-393072 FITC), Alexa Fluor® 488 (sc-393072 AF488), Alexa Fluor® 546 (sc-393072 AF546), Alexa Fluor® 594 (sc-393072 AF594) or Alexa Fluor® 647 (sc-393072 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393072 AF680) or Alexa Fluor® 790 (sc-393072 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393072 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

FSD2 (H-11) is recommended for detection of FSD2 of mouse, rat and 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 FSD2 siRNA (h): sc-90283, FSD2 siRNA (m): sc-145256, FSD2 shRNA Plasmid (h): sc-90283-SH, FSD2 shRNA Plasmid (m): sc-145256-SH, FSD2 shRNA (h) Lentiviral Particles: sc-90283-V and FSD2 shRNA (m) Lentiviral Particles: sc-145256-V.

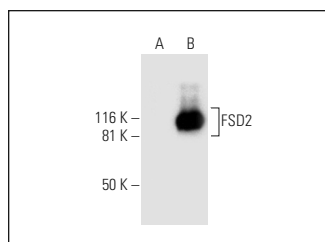
Molecular Weight of FSD2: 85 kDa.

Positive Controls: FSD2 (m): 293T Lysate: sc-178642.

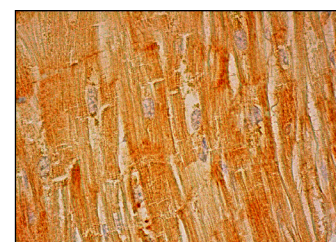
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



FSD2 (H-11): sc-393072. Western blot analysis of FSD2 expression in non-transfected: sc-117752 (A) and mouse FSD2 transfected: sc-178642 (B) 293T whole cell lysates.



FSD2 (H-11): sc-393072. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

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.

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