

MFSD3 (B-24): sc-133784

BACKGROUND

The Major facilitator superfamily consists of presumed carbohydrate transporters with 10-12 membrane-spanning domains. MFSD3 (Major facilitator superfamily domain-containing protein 3) is a 412 amino acid multi-pass membrane protein that is likely a carrier that transports small solutes by using chemiosmotic ion gradients. Significantly, a related protein, MFSD2, may play a role in placenta morphogenesis and may also be involved in adaptive thermogenesis. The gene encoding MFSD3 maps to chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and are typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MFSD3 (human) mapping to 8q24.3; Mfsd3 (mouse) mapping to 15 D3.

SOURCE

MFSD3 (B-24) is an affinity purified rabbit polyclonal antibody raised against synthetic MFSD3 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

MFSD3 (B-24) is recommended for detection of MFSD3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 MFSD3 siRNA (h): sc-77574, MFSD3 siRNA (m): sc-149408, MFSD3 shRNA Plasmid (h): sc-77574-SH, MFSD3 shRNA Plasmid (m): sc-149408-SH, MFSD3 shRNA (h) Lentiviral Particles: sc-77574-V and MFSD3 shRNA (m) Lentiviral Particles: sc-149408-V.

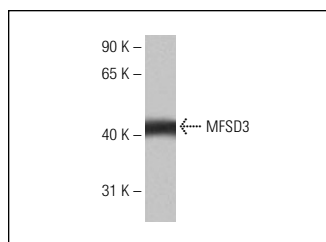
Molecular Weight of MFSD3: 43 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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



MFSD3 (B-24): sc-133784. Western blot analysis of MFSD3 expression in MCF7 whole cell lysate.

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.