SANTA CRUZ BIOTECHNOLOGY, INC.

MCFD2 (Z-7): sc-101281

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Multiple coagulation factor deficiency protein 2 (MCFD2) is localized in the endoplasmic reticulum-Golgi intermediate compartment (ERGIC) through a direct, calcium-dependent interaction with LMAN1. The MCFD2-LMAN1 complex forms a specific cargo receptor for the transport of selected proteins from the endoplasmic reticulum to the Golgi apparatus. Mutations in the MCFD2 gene may cause Factor V and Factor VIII combined deficiency (F5F8D). F5F8D is an autosomal recessive human bleeding disorder characterized by the reduction of both clotting proteins.

REFERENCES

1. Zhang, B., et al. 2003. Bleeding due to disruption of a cargo-specific ER-to-Golgi transport complex. Nat. Genet. 34: 220-225.
2. Spatuzza, C., et al. 2004. Heat shock induces preferential translation of ERGIC-53 and affects its recycling pathway. J. Biol. Chem. 279: 42535-42544.
3. Zhang, B., et al. 2004. Familial multiple coagulation factor deficiencies: new biologic insight from rare genetic bleeding disorders. J. Thromb. Haemost. 2: 1564-1572.
4. Zhang, B., et al. 2005. LMAN1 and MCFD2 form a cargo receptor complex and interact with coagulation Factor VIII in the early secretory pathway. J. Biol. Chem. 280: 25881-25886.
5. Mohanty, D., et al. 2005. Mutations in the MCFD2 gene and a novel mutation in the LMAN1 gene in Indian families with combined deficiency of Factor V and VIII. Am. J. Hematol. 79: 262-266.
4. Zhang, B., et al. 2005. Combined deficiency of factor V and factor VIII is due to mutations in either LMAN1 or MCFD2. Blood 107: 1903-1907.

CHROMOSOMAL LOCATION

Genetic locus: MCFD2 (human) mapping to 2p21.

SOURCE

MCFD2 (Z-7) is a mouse monoclonal antibody raised against recombinant MCFD2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

MCFD2 (Z-7) is recommended for detection of MCFD2 of human origin by 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).

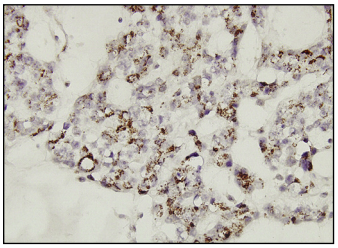
Suitable for use as control antibody for MCFD2 siRNA (h): sc-44445, MCFD2 shRNA Plasmid (h): sc-44445-SH and MCFD2 shRNA (h) Lentiviral Particles: sc-44445-V.

Molecular Weight of MCFD2: 17 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) 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.

DATA



MCFD2 (Z-7): sc-101281. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human ovary, clear cell carcinoma tissue showing cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.