

Frabin (S-19): sc-8596

BACKGROUND

The Rho subfamily of Ras-related GTPases controls multiple aspects of cell function, including cytoskeletal rearrangement, nuclear signaling, and cell growth. The Rho family GTPases function as regulated switches that toggle between a biologically active GTP-bound and an inactive GDP-bound form. This activation is catalyzed by guanine nucleotide exchange factors (GEFs). The Dbl-related proteins are a large family of structurally related molecules that have a common ability to catalyze GEF activity for specific members of the Rho family. FGD1, a Dbl-related protein also known as fasciogenital dysplasia gene product, functions as a GEF for the Rho family member CDC42. Frabin, also known as FGD1-related F-actin binding protein, catalyzes CDC42 GEF activity and binds actin filaments, implicating it as a potential link between CDC42 and the cytoskeleton.

REFERENCES

1. Bourne, H.R., Sanders, D.A. and McCormick, F. 1990. The GTPase superfamily: a conserved switch for diverse cell functions. *Nature* 348: 125-132.
2. Boguski, M.S. and McCormick, F. 1993. Proteins regulating Ras and its relatives. *Nature* 366: 643-654.
3. Cerione, R.A. and Zheng, Y. 1996. The Dbl family of oncogenes. *Curr. Opin. Cell Biol.* 8: 216-222.

CHROMOSOMAL LOCATION

Genetic locus: FGD4 (human) mapping to 12p11.21; Fgd4 (mouse) mapping to 16 A3.

SOURCE

Frabin (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Frabin of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8596 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Frabin (S-19) is recommended for detection of Frabin of mouse, rat and, to a lesser extent, 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)], 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).

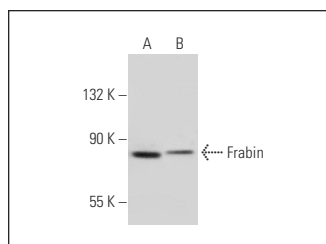
Suitable for use as control antibody for Frabin siRNA (h): sc-41717, Frabin siRNA (m): sc-41718, Frabin shRNA Plasmid (h): sc-41717-SH, Frabin shRNA Plasmid (m): sc-41718-SH, Frabin shRNA (h) Lentiviral Particles: sc-41717-V and Frabin shRNA (m) Lentiviral Particles: sc-41718-V.

Molecular Weight of Frabin: 105 kDa.

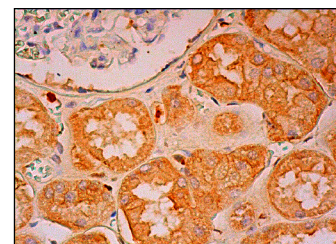
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Frabin (S-19): sc-8596. Western blot analysis of Frabin expression in MOLT-4 whole cell lysate (A) and human uterus tissue extract (B).



Frabin (S-19): sc-8596. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and membrane staining of cells in tubules.

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.



Try **Frabin (43): sc-136333**, our highly recommended monoclonal alternative to Frabin (S-19).