**BACKGROUND**

Fis1 localizes to the outer mitochondrial membrane and, along with dynamin-related protein (Drp1), participates in mitochondrial fission. Fission and fusion mechanisms regulate mitochondrial morphology within the cell. Fission frequency is determined by the level of Fis1 molecules at the mitochondrial surface. Fis1 contains a C-terminal domain, which is required for mitochondrial localization, and an N-terminal domain, which is necessary for mitochondrial fission. Fragmentation of the mitochondrial network by Fis1 leads to cytochrome c release and apoptosis. The mitochondrial fission mechanisms may be involved in positively and negatively regulating apoptosis.

**CHROMOSOMAL LOCATION**

Genetic locus: FIS1 (human) mapping to 7q22.1; Fis1 (mouse) mapping to 5G2.

**SOURCE**

Fis1 (B-5) is a mouse monoclonal antibody raised against amino acids 1-152 representing full length Fis1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Fis1 (B-5) is available conjugated to agarose (sc-376447 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376447 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376447 FITC), Alexa Fluor® 488 (sc-376447 AF488), Alexa Fluor® 546 (sc-376447 AF546), Alexa Fluor® 594 (sc-376447 AF594) or Alexa Fluor® 647 (sc-376447 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376447 AF680) or Alexa Fluor® 790 (sc-376447 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Fis1 (B-5) is recommended for detection of Fis1 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 Fis1 siRNA (h): sc-60643, Fis1 siRNA (m): sc-60644, Fis1 shRNA Plasmid (h): sc-60643-SH, Fis1 shRNA Plasmid (m): sc-60644-SH, Fis1 shRNA (h) Lentiviral Particles: sc-60643-V and Fis1 shRNA (m) Lentiviral Particles: sc-60644-V.

Molecular Weight of Fis1: 17 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, SK-BR-3 whole cell lysate: sc-2218 or HeLa whole cell lysate: sc-2200.

**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.

**DATA**


**SELECT PRODUCT CITATIONS**

**PROTOCOLS**

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

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