fidgetin (F-2): sc-514956

BACKGROUND

The mouse Fign gene encodes a 759 amino acid protein that is a member of the AAA (ATPases associated with diverse cellular activities) family of ATPases. Fidgetin is a member of the "meiotic" or subfamily-7 group of ATPases associated with diverse cellular activities (AAA proteins). Fidgetin can interact with itself and this interaction can be abolished by truncating either the N- or C-terminus of the protein. AAA proteins are molecular chaperones that facilitate membrane fusion, proteolysis, peroxisome biogenesis, endosome sorting and meiotic spindle formation. The mouse mutation fidget arose spontaneously in a heterogeneous albino stock. This mutant mouse is characterized by a side-to-side head-shaking and circling behavior due to reduced or absent semicircular canals. Fidget mice have small eyes that are associated with cell-cycle delay and insufficient growth of the retinal neural epithelium, and lower penetrance skeletal abnormalities including pelvic girdle dysgenesis, skull bone fusions and polydactyly.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: FIGN (human) mapping to 2q24.3; Fign (mouse) mapping to 2 C1.3.

SOURCE

fidgetin (F-2) is a mouse monoclonal antibody raised against amino acids 75-220 mapping near the N-terminus of fidgetin of human origin.

PRODUCT

Each vial contains 200 µg IgG2k kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

fidgetin (F-2) is available conjugated to agarose (sc-514956 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514956 HRP), 200 µg/ml, for WB, HICP and ELISA; to either phycoerythrin (sc-514956 PE), fluoroscein (sc-514956 FITC), Alexa Fluor® 488 (sc-514956 AF488), Alexa Fluor® 546 (sc-514956 AF546), Alexa Fluor® 594 (sc-514956 AF594) or Alexa Fluor® 647 (sc-514956 AF647), 200 µg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-514956 AF680) or Alexa Fluor® 750 (sc-514956 AF750), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

fidgetin (F-2) is recommended for detection of fidgetin 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 1:50-1:1500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for fidgetin siRNA (h): sc-62318, fidgetin siRNA (m): sc-62319, fidgetin shRNA Plasmid (h): sc-62318-SH, fidgetin shRNA Plasmid (m): sc-62319-SH, fidgetin shRNA (h) Lentiviral Particles: sc-62318-V and fidgetin shRNA (m) Lentiviral Particles: sc-62319-V.

Molecular Weight of fidgetin: 82 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, RPMI2650 whole cell lysate: sc-364192 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

APPLICATIONS

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


RECOMMENDED SUPPORT REAGENTS

DATA

SELECT PRODUCT CITATIONS


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.