

Flightless I (B-6): sc-377029

BACKGROUND

The *Drosophila melanogaster* Flightless I gene is required for normal cellularization of the syncytial blastoderm in early embryogenesis and in the structural organization of indirect flight muscle. The Flightless I protein contains an Actin-binding domain with homology to the gelsolin family and is likely to be involved in Actin cytoskeletal rearrangements. Flightless I also contains an N-terminal leucine-rich repeat protein-protein interaction domain. The Flightless I protein localizes predominantly to the nucleus and translocates to the cytoplasm following serum stimulation. In cells stimulated to migrate, the Flightless I protein co-localizes with β -Tubulin- and Actin-based structures. The human FLI gene is mapped within the Smith-Magenis microdeletion region of chromosome 17 at 17p11.2. Smith-Magenis syndrome is characterized by short stature, brachydactyly, developmental delay, dysmorphic features, sleep disturbances and behavioral problems.

CHROMOSOMAL LOCATION

Genetic locus: FLII (human) mapping to 17p11.2; Flii (mouse) mapping to 11 B2.

SOURCE

Flightless I (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1087-1123 near the C-terminus of Flightless I of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-377029 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Flightless I (B-6) is recommended for detection of Flightless I of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Flightless I (B-6) is also recommended for detection of Flightless I in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Flightless I siRNA (h): sc-35386, Flightless I siRNA (m): sc-35387, Flightless I shRNA Plasmid (h): sc-35386-SH, Flightless I shRNA Plasmid (m): sc-35387-SH, Flightless I shRNA (h) Lentiviral Particles: sc-35386-V and Flightless I shRNA (m) Lentiviral Particles: sc-35387-V.

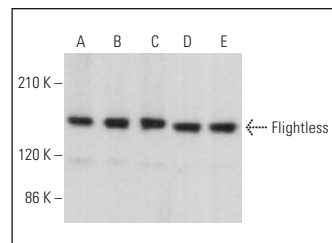
Molecular Weight of Flightless I: 145 kDa.

Positive Controls: Flightless I (m): 293T Lysate: sc-125338, SJRH30 cell lysate: sc-2287 or HeLa whole cell lysate: sc-2200.

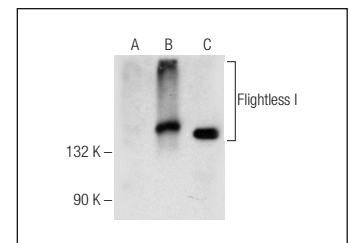
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Flightless I (B-6): sc-377029. Western blot analysis of Flightless I expression in A-10 (A), L6 (B), Sol8 (C), C2C12 (D) and HeLa (E) whole cell lysates.



Flightless I (B-6): sc-377029. Western blot analysis of Flightless I expression in non-transfected 293T: sc-117752 (A), mouse Flightless I transfected 293T: sc-125338 (B) and SJRH30 (C) whole cell lysates.

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 for detailed protocols and support products.



See **Flightless I (116.40): sc-21716** for Flightless I antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.