

Flightless I (H-300): sc-30046

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; Fliih (mouse) mapping to 11 B2.

SOURCE

Flightless I (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Flightless I of human origin.

PRODUCT

Each vial contains 200 μ g IgG 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.

APPLICATIONS

Flightless I (H-300) is recommended for detection of Flightless I of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 (H-300) is also recommended for detection of Flightless I in additional species, including avian.

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.

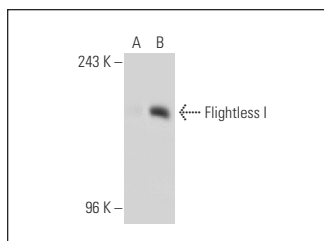
Molecular Weight of Flightless I: 145 kDa.

Positive Controls: Flightless I (m): 293T Lysate: sc-125338, Sol8 cell lysate: sc-2249 or SJRH30 cell lysate: sc-2287.

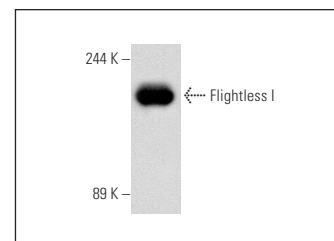
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Flightless I (H-300): sc-30046. Western blot analysis of Flightless I expression in non-transfected: sc-117752 (A) and mouse Flightless I transfected: sc-125338 (B) 293T whole cell lysates.



Flightless I (H-300): sc-30046. Western blot analysis of Flightless I expression in SJRH30 whole cell lysates.

SELECT PRODUCT CITATIONS

- Kopecki, Z., et al. 2009. Flightless I regulates hemidesmosome formation and integrin-mediated cellular adhesion and migration during wound repair. *J. Invest. Dermatol.* 129: 2031-2045.
- Mohammad, I., et al. 2012. Flightless I is a focal adhesion-associated actin-capping protein that regulates cell migration. *FASEB J.* 26: 3260-3272.
- Lei, N., et al. 2012. Flightless, secreted through a late endosome/lysosome pathway, binds LPS and dampens cytokine secretion. *J. Cell Sci.* 125: 4288-4296.
- Shrivastava, A., et al. 2015. Slit2N inhibits transmission of HIV-1 from dendritic cells to T-cells by modulating novel cytoskeletal elements. *Sci. Rep.* 5: 16833.

RESEARCH USE

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



Try **Flightless I (116.40): sc-21716** or **Flightless I (E-1): sc-55583**, our highly recommended monoclonal alternatives to Flightless I (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Flightless I (116.40): sc-21716**.