

# Flightless I (N-20): sc-22123

## 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 colocalizes with beta-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 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Flightless I of human 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-22123 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Flightless I (N-20) 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 µg per 100-500 µg 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 (N-20) 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.

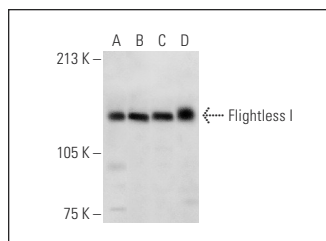
Molecular Weight of Flightless I: 145 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287, Sol8 cell lysate: sc-2249 or NIH/3T3 nuclear extract: sc-2138.

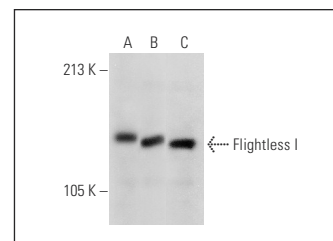
## RECOMMENDED SECONDARY REAGENTS

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.

## DATA



Flightless I (N-20): sc-22123. Western blot analysis of Flightless I expression in L6 (A) and SJRH30 (B) whole cell lysates, mouse heart tissue extract (C) and NIH/3T3 nuclear extract (D).



Flightless I (N-20): sc-22123. Western blot analysis of Flightless I expression in Sol8 (A), HeLa (B) and HEK293 (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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Flightless I (116.40): sc-21716** or **Flightless I (E-1): sc-55583**, our highly recommended monoclonal alternatives to Flightless I (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Flightless I (116.40): sc-21716**.