Flightless I (116.40): sc-21716

**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 (116.40) is a mouse monoclonal antibody raised against the N-terminus of Flightless I of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Flightless I (116.40) is available conjugated to agarose (sc-21716 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21716 HRP), 200 µg/ml, for WB, (HO) and ELISA; to either phycoerythrin (sc-21716 PE), fluorescein (sc-21716 FITC), Alexa Fluor® 488 (sc-21716 AF488), Alexa Fluor® 546 (sc-21716 AF546), Alexa Fluor® 594 (sc-21716 AF594) or Alexa Fluor® 647 (sc-21716 AF647), 200 µg/ml, for WB (RGB), IF, (HO) and FCM; and to either Alexa Fluor® 680 (sc-21716 AF680) or Alexa Fluor® 790 (sc-21716 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

Flightless I (116.40) 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 1:500-1:5000) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of Flightless I: 145 kDa.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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