Myosin VIIa (C-5): sc-74516

BACKGROUND
Myosins are molecular motors that move along filamentous Actin and influence cellular movements such as phagocytosis. There are seven classes of myosins in vertebrates, including Myosin II, and six unconventional Myosin classes, designated I, V, VI, VII, IX and X. Myosin VIIa is a plus end-directed motor that influences cilium formation and cell adhesion. Mutations in the human Myosin VIIa gene correlate with Usher syndrome, a disease characterized by congenital sensorineural deafness, vestibular dysfunction and retinitis pigmentosa.

CHROMOSOMAL LOCATION
Genetic locus: MYO7A (human) mapping to 11q13.5; Myo7a (mouse) mapping to 7 E2.

SOURCE
Myosin VIIa (C-5) is a mouse monoclonal antibody raised against amino acids 11-70 mapping near the N-terminus of Myosin VIIa of human origin.

PRODUCT
Each vial contains 200 µg IgG2a Kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Myosin VIIa (C-5) is available conjugated to agarose (sc-74516 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74516 HRP), 200 µg/ml, for WB, IHOP and ELISA; to either phycoerythrin (sc-74516 PE), fluorescent (sc-74516 FITC), Alexa Fluor® 488 (sc-74516 AF488), Alexa Fluor® 546 (sc-74516 AF546), Alexa Fluor® 594 (sc-74516 AF594) or Alexa Fluor® 647 (sc-74516 AF647), 200 µg/ml, for WB (RGB), IF, IHOP and FCM; and to either Alexa Fluor® 680 (sc-74516 AF680) or Alexa Fluor® 790 (sc-74516 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS
Myosin VIIa (C-5) is recommended for detection of Myosin VIIa isoforms 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Myosin VIIa siRNA (h): sc-43223, Myosin VIIa siRNA (m): sc-43224, Myosin VIIa shRNA Plasmid (h): sc-43223-SH, Myosin VIIa shRNA Plasmid (m): sc-43224-SH, Myosin VIIa shRNA (h) Lentiviral Particles: sc-43223-V and Myosin VIIa shRNA (m) Lentiviral Particles: sc-43224-V.

Molecular Weight of Myosin VIIa: 203 kDa.
Positive Controls: Y79 nuclear extract: sc-2126, mouse testis extract: sc-2405 or Y79 cell lysate: sc-2240.

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.

DATA

SELECT PRODUCT CITATIONS

PROTOCOLS
See our web site at www.scbt.com for detailed protocols and support products.

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