

Myosin VIIa (H-60): sc-25834

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 cilia 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.

REFERENCES

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- Maniak, M. 2001. Cell adhesion: ushering in a new understanding of Myosin VII. *Curr. Biol.* 11: R315-317.
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- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 276903. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- LocusLink Report (LocusID: 4647). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

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

SOURCE

Myosin VIIa (H-60) is a rabbit polyclonal antibody raised against amino acids 11-70 mapping near the N-terminus of Myosin VIIa 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.

STORAGE

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

APPLICATIONS

Myosin VIIa (H-60) is recommended for detection of Myosin VIIa isoforms 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).

Myosin VIIa (H-60) is also recommended for detection of Myosin VIIa isoforms in additional species, including bovine and porcine.

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.

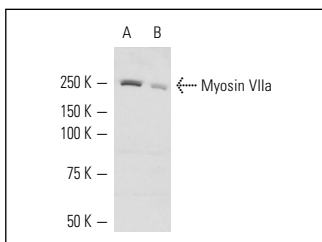
Molecular Weight of Myosin VIIa: 203 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, Y79 nuclear extract: sc-2126 or Y79 cell lysate: sc-2240.

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



Myosin VIIa (H-60): sc-25834. Western blot analysis of Myosin VIIa expression in Y79 whole cell lysate (A) and Y79 nuclear extract (B).

RESEARCH USE

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

PROTOCOLS

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