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# Myosin If (m): 293T Lysate: sc-121895

## BACKGROUND

Actin is a highly conserved protein that is expressed in all eukaryotic cells. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. Troponin facilitates interaction between Actin and Myosin by binding to  $\text{Ca}^{2+}$ . Troponin is made up of at least two subunits, which are divergent in cardiac muscle, fast skeletal muscle and slow skeletal muscle. Myosin is a hexamer of two heavy chains (MHC) and four light chains (MLC) that interacts with Actin to generate the force for diverse cellular movements, including cytokinesis, phagocytosis and muscle contraction. Myosin If (MYO1F), also designated Myosin-IE, is considered an unconventional Myosin and is expressed in the cochlea. The MYO1F gene encoding for the 1,098 amino acid protein maps to chromosome 19p13.3-13.2.

## REFERENCES

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8. Krugmann, S., et al. 2002. Identification of ARAP3, a novel PI3K effector regulating both Arf and Rho GTPases, by selective capture on phosphoinositide affinity matrices. *Mol. Cell* 9: 95-108.
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## CHROMOSOMAL LOCATION

Genetic locus: Myo1f (mouse) mapping to 17 B1.

## PRODUCT

Myosin If (m): 293T Lysate represents a lysate of mouse Myosin If transfected 293T cells and is provided as 100  $\mu\text{g}$  protein in 200  $\mu\text{l}$  SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

Myosin If (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Myosin If antibodies. Recommended use: 10-20  $\mu\text{l}$  per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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

## PROTOCOLS

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