**BACKGROUND**

Muskelin, also designated MKLN1 or TWA2, is a 735 amino acid nuclear and cytoplasmic protein that mediates cytoskeletal responses and cell spreading to Thrombospondin 1, an extracellular matrix glycoprotein. Forming a CTLH complex with RMND5A, Ran BP-M and TWA1, Muskelin exists as two alternatively spliced isoforms. Muskelin is implicated as an isoform-specific anchoring protein for the prostaglandin EP3 receptor, and contains one LisH domain, a CTLH domain, six kelch repeats and an N-terminal discoidin-like domain through which it self-associates via a head-to-tail mechanism. Human and mouse Muskelin share 98% amino acid sequence homology and are encoded by genes located on chromosomes 7q32.3 and 6 A3.3, respectively.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MKLN1 (human) mapping to 7q32.3; Mkln1 (mouse) mapping to 6 A3.3.

**SOURCE**

Muskelin (C-12) is a mouse monoclonal antibody raised against amino acids 491-735 mapping at the C-terminus of Muskelin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 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**

Muskelin (C-12) is recommended for detection of Muskelin 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 (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).

Suitable for use as control antibody for Muskelin siRNA (h): sc-89673, Muskelin siRNA (m): sc-149721, Muskelin shRNA Plasmid (h): sc-89673-SH, Muskelin shRNA Plasmid (m): sc-149721-SH, Muskelin shRNA (h) Lentiviral Particles: sc-89673-V and Muskelin shRNA (m) Lentiviral Particles: sc-149721-V.

Molecular Weight of Muskelin: 82 kDa.

Positive Controls: NCI-H460 whole cell lysate: sc-364235, Jurkat whole cell lysate: sc-2204 or Y79 cell lysate: sc-2240.

**DATA**

**RESEARCH USE**

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

**PROTOCOLS**

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