

Formin 1 (H-5): sc-515698

BACKGROUND

The temporal genetic hierarchy influencing normal limb development can deregulate and mediate mammalian developmental syndromes. In mice, the limb deformity (Id) locus influences normal limb development and gives rise to alternative mRNAs that can translate into a family of proteins known as formins. Formins play a crucial role in cytoskeletal reorganization by influencing Actin filament assembly. Formins co-localize with the actin cytoskeleton and can translocate into the cell cytosol and into the nucleus in an HGF-dependent manner. Vertebrate nuclear formins can control polarizing activity in limb buds through establishment of a Sonic hedgehog/FGF-4 feedback loop. Deficiency mutations at the mammalian Id locus lead to profound developmental defects in limb and kidney formation. The human Formin 1 and 2 genes map to chromosome 15q13.3 and 1q43, respectively.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FMN1 (human) mapping to 15q13.3; Fmn1 (mouse) mapping to 2 E4.

SOURCE

Formin 1 (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 371-392 near the C-terminus of Formin 1 of human origin.

PRODUCT

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

APPLICATIONS

Formin 1 (H-5) is recommended for detection of Formin 1 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 Formin 1 siRNA (h): sc-44482, Formin 1 siRNA (m): sc-44895, Formin 1 shRNA Plasmid (h): sc-44482-SH, Formin 1 shRNA Plasmid (m): sc-44895-SH, Formin 1 shRNA (h) Lentiviral Particles: sc-44482-V and Formin 1 shRNA (m) Lentiviral Particles: sc-44895-V.

Molecular Weight (predicted) of Formin 1 isoforms: 158/72/54/132 kDa.

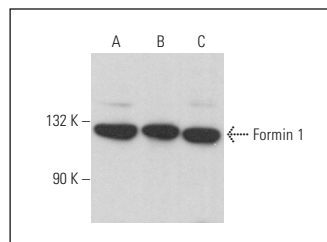
Molecular Weight (observed) of Formin 1: 169 kDa.

Positive Controls: C2C12 whole cell lysate: sc-364188, F9 cell lysate: sc-2245 or AT3B-1 whole cell lysate: sc-364372.

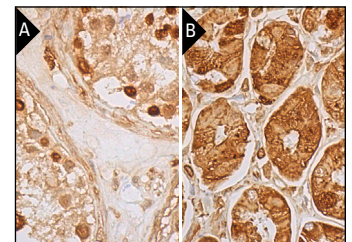
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Formin 1 (H-5): sc-515698. Western blot analysis of Formin 1 expression in F9 (A), C2C12 (B) and AT3B-1 (C) whole cell lysates.



Formin 1 (H-5): sc-515698. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts (A), and of human stomach tissue showing nuclear and cytoplasmic staining of glandular cells (B). Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216.

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.