SANTA CRUZ BIOTECHNOLOGY, INC.

Formin 1 (T-15): sc-22726

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The Power to Question

BACKGROUND

The temporal genetic hierarchy influencing normal limb development can deregulate and mediate mammalian developmental syndromes. In mice, the limb deformity (ld) 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 ld 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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3. Zeller, R., et al. 1999. Formin defines a large family of morphoregulatory genes and functions in establishment of the polarising region. Cell Tissue Res. 296: 85-93.
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CHROMOSOMAL LOCATION

Genetic locus: Fmn1 (mouse) mapping to 2 E4.

SOURCE

Formin 1 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Formin 1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-22726 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Formin 1 (T-15) is recommended for detection of Formin 1 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (m): sc-44895, Formin 1 shRNA Plasmid (m): sc-44895-SH 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: F9 cell lysate: sc-2245, BC_3H1 cell lysate: sc-2299 or mouse ovary extract: sc-2404.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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