SANTA CRUZ BIOTECHNOLOGY, INC.

FIGNL1 (D-12): sc-138279

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The Power to Question

BACKGROUND

FIGNL1 (fidgetin-like 1) is a 674 amino acid protein belonging to the AAA ATPase family. FIGNL1 exists as a hexamer that undergoes alternative splicing to produce two isoforms. FIGNL1 utilizes magnesium as a cofactor and is phosphorylated upon DNA damage, probably by ATM or ATR. FIGNL1 is suggested to regulate osteoblast proliferation and differentiation. FIGNL1 is encoded by a gene located on human chromosome 7, which consists about 158 milllion bases, encodes over 1000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FIGNL1 (human) mapping to 7p12.1; Fignl1 (mouse) mapping to 11 A1.

SOURCE

FIGNL1 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FIGNL1 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.

Blocking peptide available for competition studies, sc-138279 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FIGNL1 (D-12) is recommended for detection of FIGNL1 isoforms 1 and 2 of mouse, rat and human 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); non cross-reactive with with FIGNL2.

FIGNL1 (D-12) is also recommended for detection of FIGNL1 isoforms 1 and 2 in additional species, including bovine.

Suitable for use as control antibody for FIGNL1 siRNA (h): sc-89427, FIGNL1 siRNA (m): sc-145181, FIGNL1 shRNA Plasmid (h): sc-89427-SH, FIGNL1 shRNA Plasmid (m): sc-145181-SH, FIGNL1 shRNA (h) Lentiviral Particles: sc-89427-V and FIGNL1 shRNA (m) Lentiviral Particles: sc-145181-V.

Molecular Weight of FIGNL1 isoform 1: 74 kDa.

Molecular Weight of FIGNL1 isoform 2: 62 kDa.

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.