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FIGNL1 (F-11): sc-398667

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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 1,000 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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4. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
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CHROMOSOMAL LOCATION

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

SOURCE

FIGNL1 (F-11) is a mouse monoclonal antibody raised against amino acids 378-423 mapping within an internal region of FIGNL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FIGNL1 (F-11) is recommended for detection of FIGNL1 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 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.

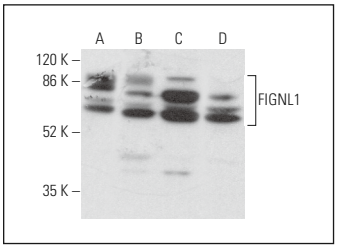
Molecular Weight of FIGNL1 isoform 1/2: 74/62 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, F9 cell lysate: sc-2245 or NIH/3T3 whole cell lysate: sc-2210.

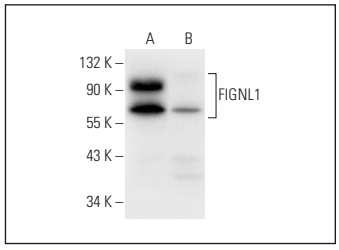
RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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



FIGNL1 (F-11): sc-398667. Western blot analysis of FIGNL1 expression in HEK293 (**A**), C3H/10T1/2 (**B**), F9 (**C**) and Jurkat (**D**) whole cell lysates.



FIGNL1 (F-11): sc-398667. Western blot analysis of FIGNL1 expression in HeLa (**A**) and NIH/3T3 (**B**) whole cell lysates.

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.