

FAT4 (D-16): sc-161576

BACKGROUND

The cadherins represent a family of Ca²⁺-dependent adhesion molecules that function to mediate cell to cell binding that is critical for the maintenance of structure and morphogenesis. Cadherins contain a large extracellular domain at the N-terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. The relatively short C-terminal intracellular domain interacts with a variety of cytoplasmic proteins, including β -catenin, to regulate cadherin function. The cadherin superfamily includes cadherins, protocadherins, desmogleins and desmocollins. FAT4 (FAT tumor suppressor homolog 4), also known as FAT-J, CDHF14 or CDHR11, is a 4,981 amino acid single-pass type I membrane protein that belongs to the protocadherin subfamily of cadherins and localizes to the primary cilia of kidney. Widely expressed, FAT4 contains 34 cadherin domains, 6 EGF-like domains and 2 laminin G-like domains. FAT4 may function in the regulation of planar cell polarity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FAT4 (human) mapping to 4q28.1; Fat4 (mouse) mapping to 3 B.

SOURCE

FAT4 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of FAT4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161576 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAT4 (D-16) is recommended for detection of FAT4 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 other FAT family members.

FAT4 (D-16) is also recommended for detection of FAT4 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for FAT4 siRNA (h): sc-88877, FAT4 siRNA (m): sc-145082, FAT4 shRNA Plasmid (h): sc-88877-SH, FAT4 shRNA Plasmid (m): sc-145082-SH, FAT4 shRNA (h) Lentiviral Particles: sc-88877-V and FAT4 shRNA (m) Lentiviral Particles: sc-145082-V.

Molecular Weight of FAT4: 543 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.

PROTOCOLS

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