

FAT3 (E-12): sc-133366

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 each 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. FAT3 (FAT tumor suppressor homolog 3, also known as CDHF15 or CDHR10, is a 4,589 amino acid single-pass type I membrane protein expressed in ES cells, primitive neuroectoderm, fetal brain, infant brain, adult neural tissues and prostate. Containing 33 cadherin domains, 4 EGF-like domains and one laminin G-like domain, FAT3 may participate in the interactions between neurites derived from specific subsets of neurons during development.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FAT3 (human) mapping to 11q14.3; Fat3 (mouse) mapping to 9 A2.

SOURCE

FAT3 (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of FAT3 of human origin.

PRODUCT

Each vial contains 100 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-133366 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAT3 (E-12) is recommended for detection of FAT3 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other FAT family members.

FAT3 (E-12) is also recommended for detection of FAT3 isoforms 1 and 2 in additional species, including canine, porcine and avian.

Suitable for use as control antibody for FAT3 siRNA (h): sc-96621, FAT3 siRNA (m): sc-145081, FAT3 shRNA Plasmid (h): sc-96621-SH, FAT3 shRNA Plasmid (m): sc-145081-SH, FAT3 shRNA (h) Lentiviral Particles: sc-96621-V and FAT3 shRNA (m) Lentiviral Particles: sc-145081-V.

Molecular Weight of FAT3: 502 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.