SANTA CRUZ BIOTECHNOLOGY, INC.

FAM171A2 (C-16): sc-242718

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FAM171A2 (family with sequence similarity 171, member A2), also known as MGC34829, is a 826 single-pass type I membrane protein belonging to the FAM171 family and is encoded by a gene located on human chromosome 17. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair and is specifically recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes. Chromosome 17 is also linked to neurofibromatosis, a condition characterized by neural and epidermal lesions and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

REFERENCES

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

CHROMOSOMAL LOCATION

Genetic locus: FAM171A2 (human) mapping to 17q21.31; Fam171a2 (mouse) mapping to 11 D.

SOURCE

FAM171A2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of FAM171A2 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-242718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM171A2 (C-16) is recommended for detection of FAM171A2 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 FAM171A1 or FAM171B.

FAM171A2 (C-16) is also recommended for detection of FAM171A2 in additional species, including porcine.

Suitable for use as control antibody for FAM171A2 siRNA (h): sc-93905, FAM171A2 siRNA (m): sc-141540, FAM171A2 shRNA Plasmid (h): sc-93905-SH, FAM171A2 shRNA Plasmid (m): sc-141540-SH, FAM171A2 shRNA (h) Lentiviral Particles: sc-93905-V and FAM171A2 shRNA (m) Lentiviral Particles: sc-141540-V.

Molecular Weight of FAM171A2: 87 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.

PROTOCOLS

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