

# FAM171A1 (C-19): sc-246638

## BACKGROUND

FAM171A1, also known as astroprincin, is a 890 amino acid single-pass type-I membrane protein that is encoded by a gene that maps to human chromosome 10, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome which is characterized by extreme photosensitivity and premature aging. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10. As with most trisomies, trisomy 10 is rare and is deleterious.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FAM171A1 (human) mapping to 10p13; Fam171a1 (mouse) mapping to 2 A1.

## RESEARCH USE

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

## SOURCE

FAM171A1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of FAM171A1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-246638 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

FAM171A1 (C-19) is recommended for detection of FAM171A1 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 FAM171A2 or FAM171B.

FAM171A1 (C-19) is also recommended for detection of FAM171A1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FAM171A1 siRNA (h): sc-90617, FAM171A1 siRNA (m): sc-140575, FAM171A1 shRNA Plasmid (h): sc-90617-SH, FAM171A1 shRNA Plasmid (m): sc-140575-SH, FAM171A1 shRNA (h) Lentiviral Particles: sc-90617-V and FAM171A1 shRNA (m) Lentiviral Particles: sc-140575-V.

Molecular Weight of FAM171A1: 98 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](http://www.scbt.com) or our catalog for detailed protocols and support products.