

# FAM179B (P-18): sc-246655

## BACKGROUND

FAM179B is a 1,720 amino acid protein that contains 6 HEAT repeats, which are found in many cytoplasmic proteins and may be involved in intracellular transport. FAM179B exists as three alternatively spliced isoforms. The gene encoding FAM179B maps to human chromosome 14, which contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is located on chromosome 14 and when defective leads to the genetic disorder  $\alpha$ 1-antitrypsin deficiency. This disorder is characterized by severe lung complications and liver dysfunction. Notably, the immunoglobulin heavy chain locus is found on chromosome 14 and has been identified as a fusion with the chromosome 19 encoded protein BCL3 in the (14;19) translocations found in a variety of B cell malignancies.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FAM179B (human) mapping to 14q21.2; Fam179b (mouse) mapping to 12 C1.

## SOURCE

FAM179B (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FAM179B 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-246655 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

FAM179B (P-18) is recommended for detection of FAM179B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with FAM179A.

FAM179B (P-18) is also recommended for detection of FAM179B in additional species, including equine, canine and porcine.

Suitable for use as control antibody for FAM179B siRNA (h): sc-92277, FAM179B siRNA (m): sc-140635, FAM179B shRNA Plasmid (h): sc-92277-SH, FAM179B shRNA Plasmid (m): sc-140635-SH, FAM179B shRNA (h) Lentiviral Particles: sc-92277-V and FAM179B shRNA (m) Lentiviral Particles: sc-140635-V.

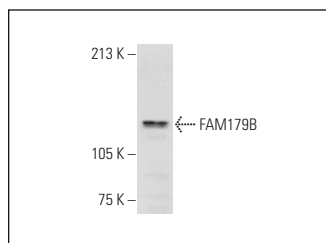
Molecular Weight of FAM179B isoforms 1/2/3: 189/109/107 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



FAM179B (P-18): sc-246655. Western blot analysis of FAM179B expression in K-562 whole cell lysate.

## 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.