

# BRINP3 (N-16): sc-139453

## BACKGROUND

BRINP3, also known as DBCCR1L, DBCCR1L1 (DBCCR1-like protein 1) or FAM5C, is a 766 amino acid secreted protein that belongs to the FAM5 family and has been shown to contribute to aggressive periodontitis. A potential novel tumor suppressor gene in tongue squamous cell carcinoma, BRINP3 is encoded by a gene that maps to human chromosome 1q31.1. Chromosome 1 spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

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2. Bowling, E.L., et al. 2000. The Stickler syndrome: case reports and literature review. *Optometry* 71: 177-182.
3. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
4. Oliveira, S.A., et al. 2005. Identification of risk and age-at-onset genes on chromosome 1p in Parkinson disease. *Am. J. Hum. Genet.* 77: 252-264.
5. Connelly, J.J., et al. 2008. Genetic and functional association of FAM5C with myocardial infarction. *BMC Med. Genet.* 9: 33.
6. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. *Am. J. Psychiatry* 166: 206-215.
7. Kuroiwa, T., et al. 2009. Expression of the FAM5C in tongue squamous cell carcinoma. *Oncol. Rep.* 22: 1005-1011.
8. Carvalho, F.M., et al. 2010. FAM5C contributes to aggressive periodontitis. *PLoS ONE* 5: e10053.

## CHROMOSOMAL LOCATION

Genetic locus: FAM5C (human) mapping to 1q31.1; Fam5c (mouse) mapping to 1 F.

## SOURCE

BRINP3 (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of BRINP3 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139453 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BRINP3 (N-16) is recommended for detection of BRINP3 of human origin and Fam5c of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 BRINP2.

BRINP3 (N-16) is also recommended for detection of BRINP3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BRINP3 siRNA (h): sc-88341, Fam5c siRNA (m): sc-141454, BRINP3 shRNA Plasmid (h): sc-88341-SH, Fam5c shRNA Plasmid (m): sc-141454-SH, BRINP3 shRNA (h) Lentiviral Particles: sc-88341-V and Fam5c shRNA (m) Lentiviral Particles: sc-141454-V.

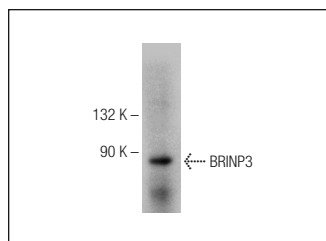
Molecular Weight of BRINP3: 88 kDa.

Positive Controls: rat pituitary gland extract: sc-364807.

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

## DATA



BRINP3 (N-16): sc-139453. Western blot analysis of BRINP3 expression in rat pituitary tissue extract.

## 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.