RP9 (P-16): sc-163314



The Power to Question

BACKGROUND

RP9 (retinitis pigmentosa 9 protein), also known as Pim-1 kinase associated protein or PAP-1, is a 221 amino acid nuclear protein that associates with Pim-1 to influence B-cell proliferation. Expressed in a multitude of tissues, RP9 may also be the target protein for Pim-1 kinase. The gene encoding RP9 maps to human chromosome 7p14.3, which, when defective, is the cause of a disorder known as retinitis pigmentosa type 9 (RP9). Patients with retinitis pigmentosa 9 experience degeneration of retinal photoreceptor cells. Chromosome 7 houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to osteogenesis imperfecta, pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

- 1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro α 2 gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
- Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
- Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
- Keen, T.J., et al. 2002. Mutations in a protein target of the Pim-1 kinase associated with the RP9 form of autosomal dominant retinitis pigmentosa. Eur. J. Hum. Genet. 10: 245-249.
- 5. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.
- Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
- Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. Rev. Prat. 56: 2102-2106.
- Leone, G., et al. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. Haematologica 92: 1389-1398.

CHROMOSOMAL LOCATION

Genetic locus: RP9 (human) mapping to 7p14.3; Rp9 (mouse) mapping to 9 A3.

SOURCE

RP9 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RP9 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163314 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RP9 (P-16) is recommended for detection of RP9 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 pther RP family members.

RP9 (P-16) is also recommended for detection of RP9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RP9 siRNA (h): sc-89416, RP9 siRNA (m): sc-153095, RP9 shRNA Plasmid (h): sc-89416-SH, RP9 shRNA Plasmid (m): sc-153095-SH, RP9 shRNA (h) Lentiviral Particles: sc-89416-V and RP9 shRNA (m) Lentiviral Particles: sc-153095-V.

Molecular Weight of RP9: 26 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) with UltraCruz™ Mounting Medium: sc-24941.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**