SANTA CRUZ BIOTECHNOLOGY, INC.

PRB4 (C-12): sc-240785



The Power to Question

BACKGROUND

Salivary proline-rich proteins are synthesized in acinar cells of salivary glands and function as essential components of parotid and submandibular saliva. There are six members of the human salivary proline-rich protein family, namely, PRB1, PRB2, PRB3, PRB4, PRH1 and PRH2, each of which is encoded by a gene approximately 4kb long with an exon containing a proline-rich portion. Thought to originate from a single ancestral gene, members of the salivary proline-rich protein family are encoded by genes that map to a cluster on human chromosome 12p13. PRB4 (proline-rich protein BstNI subfamily 4), also known as basic salivary proline-rich protein 4, parotid o protein, salivary proline-rich protein III-1 or Po, is a 392 amino acid secreted protein that is cleaved into three chains and contains polymorphic tandem repeats varying among different alleles.

REFERENCES

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- 5. Kim, H.S., et al. 1993. The structure and evolution of the human salivary proline-rich protein gene family. Mamm. Genome 4: 3-14.
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- 7. Stubbs, M., et al. 1998. Encoding of human basic and glycosylated proline-rich proteins by the PRB gene complex and proteolytic processing of their precursor proteins. Arch. Oral Biol. 43: 753-770.
- Castle, A.M., et al. 1998. Enhanced glycosylation and sulfation of secretory proteoglycans is coupled to the expression of a basic secretory protein. Mol. Biol. Cell 9: 575-583.
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CHROMOSOMAL LOCATION

Genetic locus: PRB4 (human) mapping to 12p13.2.

SOURCE

PRB4 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PRB4 of human origin.

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-240785 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRB4 (C-12) is recommended for detection of PRB4 precursor and peptide P-D of 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); may cross-react with COG1 or PAPPA.

Suitable for use as control antibody for PRB4 siRNA (h): sc-95800, PRB4 shRNA Plasmid (h): sc-95800-SH and PRB4 shRNA (h) Lentiviral Particles: sc-95800-V.

Molecular Weight of PRB4: 31 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) Immunofluo-rescence: 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, **D0 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.

PROTOCOLS

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