SANTA CRUZ BIOTECHNOLOGY, INC.

PRRG1 (T-15): sc-169045

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The Power to Question

BACKGROUND

PRRG1 (proline-rich γ-carboxyglutamic acid protein 1), also known as TMG1 (transmembrane γ-carboxyglutamic acid protein 1) or PRGP1, is a 218 amino acid single-pass type I membrane protein that is highly expressed in spinal cord. A member of the vitamin K-dependent family of proteins, PRRG1 contains an N-terminal propeptide sequence that allows for vitamin K-dependent γ-carboxylation of various glutamic acid residues, followed by an N-terminal Gla (γ-carboxy-glutamate) domain. PRRG1 has a proline-rich C-terminus with PPXY and PXXP motifs. The gene encoding PRRG1 maps to human chromosome X, which consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRRG1 (human) mapping to Xp21.1; Prrg1 (mouse) mapping to X B.

SOURCE

PRRG1 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of PRRG1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-169045 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

PRRG1 (T-15) is recommended for detection of PRRG1 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 other PRRG family members.

PRRG1 (T-15) is also recommended for detection of PRRG1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PRRG1 siRNA (h): sc-90938, PRRG1 siRNA (m): sc-152516, PRRG1 shRNA Plasmid (h): sc-90938-SH, PRRG1 shRNA Plasmid (m): sc-152516-SH, PRRG1 shRNA (h) Lentiviral Particles: sc-90938-V and PRRG1 shRNA (m) Lentiviral Particles: sc-152516-V.

Molecular Weight of PRRG1: 25 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 or our catalog for detailed protocols and support products.