SANTA CRUZ BIOTECHNOLOGY, INC.

PCDHB4 (S-13): sc-109780

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The Power to Question

BACKGROUND

Protocadherins are a large family of cadherin-like cell adhesion proteins that are involved in the establishment and maintenance of neuronal connections in the brain. There are three protocadherin gene clusters, designated α, β and γ, all of which contain multiple tandemly arranged genes. PCDHB4 (protocadherin β-4) is a 795 amino acid single pass transmembrane protein that is one of 16 proteins in the protocadherin β cluster. Unlike the α and γ gene clusters whose genes are spliced to downstream constant region exons during transcription, members of the β cluster (such as PCDHB4) do not use constant-region exons to produce mRNAs. As a result, each protocadherin β gene encodes the transmembrane, extracellular and short cytoplasmic domains of the protein. PCDHB4 is likely a calcium-dependent cell adhesion protein that is involved in the maintenance of neural connections in the brain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PCDHB4 (human) mapping to 5q31.3.

SOURCE

PCDHB4 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDHB4 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109780 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHB4 (S-13) is recommended for detection of PCDHB4 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); non cross-reactive with other PCDHB family members.

PCDHB4 (S-13) is also recommended for detection of PCDHB4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PCDHB4 siRNA (h): sc-92039, PCDHB4 shRNA Plasmid (h): sc-92039-SH and PCDHB4 shRNA (h) Lentiviral Particles: sc-92039-V.

Molecular Weight of PCDHB4: 87 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.

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.