# PCDHGB3 (S-12): sc-131305



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  $\alpha,\,\beta$  and  $\gamma,$  all of which contain multiple tandemly arranged genes. The protocadherein  $\gamma$  cluster consists of three subfamilies (A, B and C). As a member of the  $\gamma$  subfamily B, PCDHGB3 (protocadherin  $\gamma$  B3) is a 929 amino acid protein that is one of 22 proteins encoded by the protocadherin  $\gamma$  cluster. Typical of  $\gamma$  protocadherins, PCDHGB3 contains six cadherin motifs and is a type I transmembrane receptor expressed in the central nervous system. With localization to synapses, members of the  $\gamma$  cluster of protocadherins are essential for neuronal survival. There are two isoforms of PCDHGB3 that are produced as a result of alternative splicing events.

### **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: PCDHGB3 (human) mapping to 5q31.3.

#### **SOURCE**

PCDHGB3 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of PCDHGB3 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131305 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

PCDHGB3 (S-12) is recommended for detection of PCDHGB3 isoforms 1 and 2 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 PCDH family members.

Suitable for use as control antibody for PCDHGB3 siRNA (h): sc-106778, PCDHGB3 shRNA Plasmid (h): sc-106778-SH and PCDHGB3 shRNA (h) Lentiviral Particles: sc-106778-V.

Molecular Weight of PCDHGB3: 101 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.

#### **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.

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