BACKGROUND
As a subfamily of the cadherin superfamily, protocadherins are cadherin-like cell adhesion proteins that contain up to seven extracellular domains and are predominantly expressed in the nervous system. Importantly, the adhesion mechanism of protocadherins is distinct from classic cadherins. Through inactivation or overexpression, several protocadherins have been implicated in a variety of cancers. PCDH7 (protocadherin 7), also known as BHPCDH or BH-Pcdh, is a 1,069 amino acid single-pass I membrane protein that is expressed in the brain and heart. Containing seven cadherin domains, PCDH7 is thought to function in cell-cell recognition and adhesion. PCDH7 exists as three isoforms due to alternative splicing events.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: PCDH7 (human) mapping to 4p15.1; Pcdh7 (mouse) mapping to 5 C1.

SOURCE
PCDH7 (2D7) is a mouse monoclonal antibody raised against amino acids 31-124 representing partial length PCDH7 of human origin.

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

PRODUCT
Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
PCDH7 (2D7) is recommended for detection of PCDH7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCDH7 siRNA (h): sc-88977, PCDH7 siRNA (m): sc-106363, PCDH7 shRNA Plasmid (h): sc-88977-SH, PCDH7 shRNA Plasmid (m): sc-106363-SH, PCDH7 shRNA (h) Lentiviral Particles: sc-88977-V and PCDH7 shRNA (m) Lentiviral Particles: sc-106363-V.

Molecular Weight of PCDH7: 130 kDa.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1 :1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting LuminoL Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

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 for detailed protocols and support products.