SANTA CRUZ BIOTECHNOLOGY, INC.

PCDH2 (D-11): sc-376885

SANTA CRUZ BIOTECHNOLOGY

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. PCDH2 (protocadherin-2), also known as PCDHGC3 (protocadherin γ subfamily C, 3) or PC43, is a 934 amino acid single-pass type I membrane protein that contains six cadherin domains and belongs to the protocadherin γ family. Functioning as a calcium-dependent cell-adhesion protein, PCDH2 is thought to be involved in the establishment and maintenance of neuronal connections within the brain. Multiple isoforms of PCDH2 exist due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: PCDHGC3 (human) mapping to 5q31.3.

SOURCE

PCDH2 (D-11) is a mouse monoclonal antibody raised against amino acids 453-563 mapping within an internal region of PCDH2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PCDH2 (D-11) is available conjugated to agarose (sc-376885 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376885 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376885 PE), fluorescein (sc-376885 FITC), Alexa Fluor® 488 (sc-376885 AF488), Alexa Fluor® 546 (sc-376885 AF546), Alexa Fluor® 594 (sc-376885 AF594) or Alexa Fluor® 647 (sc-376885 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376885 AF680) or Alexa Fluor® 790 (sc-376885 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

PCDH2 (D-11) is recommended for detection of PCDH2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCDH2 siRNA (h): sc-76082, PCDH2 shRNA Plasmid (h): sc-76082-SH and PCDH2 shRNA (h) Lentiviral Particles: sc-76082-V.

Molecular Weight (predicted) of PCDH2: 101 kDa.

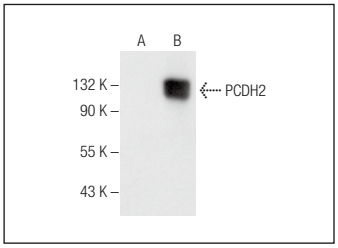
Molecular Weight (observed) of PCDH2: 118-137 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or PCDH2 (h): 293T Lysate: sc-172657.

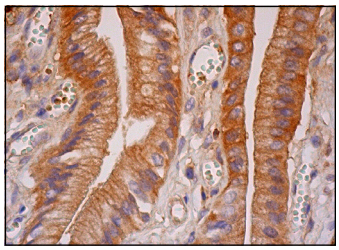
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PCDH2 (D-11): sc-376885. Western blot analysis of PCDH2 expression in non-transfected: sc-117752 (**A**) and human PCDH2 transfected: sc-172657 (**B**) 293T whole cell lysates.



PCDH2 (D-11): sc-376885. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Munteanu, C.V.A., et al. 2021. Affinity proteomics and deglycoproteomics uncover novel EDEM2 endogenous substrates and an integrative ERAD network. Mol. Cell. Proteomics 20: 100125.
2. Munteanu, C.V.A., et al. 2022. Defining the altered glycoproteomic space of the early secretory pathway by class I mannosidase pharmacological inhibition. Front. Mol. Biosci. 9: 1064868.

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.