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Datasheet for 200-301-W68

Protocadherin Gamma (pan) Antibody

Overview

Description:	Anti-Protocadherin gamma (pan) (MOUSE) Monoclonal Antibody - 200-301-W68
Item No.:	200-301-W68
Size:	100 µg
Applications:	IHC, IP, WB
Reactivity:	Mouse, Rat
Host Species:	Mouse

Product Details

Background:	The protocadherin gamma gene cluster is one of three related clusters tandemly linked on chromosome five. These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. The gamma gene cluster includes 22 genes divided into 3 subfamilies. Subfamily A contains 12 genes, subfamily B contains 7 genes and 2 pseudogenes, and the more distantly related subfamily C contains 3 genes. The tandem array of 22 large, variable region exons are followed by a constant region, containing 3 exons shared by all genes in the cluster. Each variable region exon encodes the extracellular region, which includes 6 cadherin ectodomains and a transmembrane region. The constant region exons encode the common cytoplasmic region. These neural cadherin-like cell adhesion proteins most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been described for the gamma cluster genes. Anti-Protocadherin Gamma (pan) is ideal for research in Neuroscience, Cell Adhesion and Cell Signaling.
Synonyms:	PCDH, Protocadherin Gamma antibody, PCDH gamma antibody, PCDH-gamma, PCDHG, Protocadherin gamma , Protocadherin gamma, Gamma Protocadherin (pan), Pan-Gamma-Protocadherin, Pan Gamma Protocadherin
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S159-5
Format:	IgG1

Target Details

Gene Name:	Pcdhga1
Reactivity:	Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-Protocadherin Gamma (pan) Antibody was produced by repeated immunization of mice with a fusion protein containing amino acids 808-931 of mouse Protocadherin-gamma-A1 that is shared by all 22 Gamma-protocadherins.
Purity/Specificity:	Anti-Protocadherin Gamma (pan) Antibody was purified from concentrated tissue culture supernate by Protein G chromatography. BLAST analysis suggests that it is 99% identical to human.
Relevant Links:	• UniProtKB - Q91XZ0 • GeneID - 93709

Application Details

Tested Applications:	IHC, IP, WB
Application Note:	Anti-Protocadherin Gamma (pan) Antibody is tested for Western Blots and Immunocytochemistry. Expect a band approximately ~100 kDa on specific lysates or tissues. It will cross react with all Gamma-protocadherins -A, -B, and -C. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1:1000

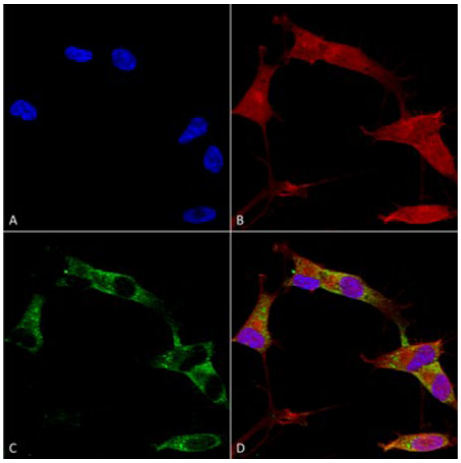
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

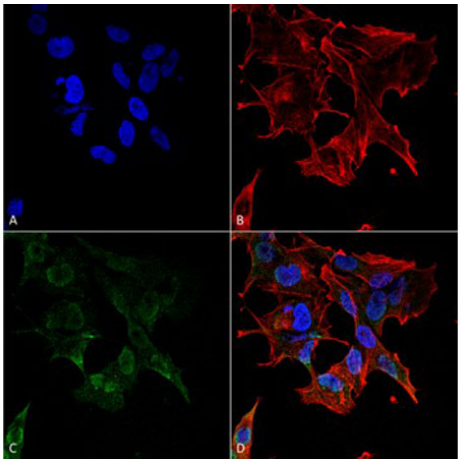
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

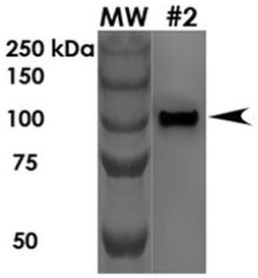
Images



Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody.
Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human.
Fixation: 4% PFA for 15 min.
Primary Antibody: Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody at 1:100 for overnight at 4°C.
Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT.
Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Protocadherin Gamma (pan) Antibody (D) Composite.



Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody.
Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human.
Fixation: 4% Formaldehyde for 15 min at RT.
Primary Antibody: Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody at 1:100 for 60 min at RT.
Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT.
Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT.
Localization: Cell Membrane, Nucleus . Magnification: 60X.
(A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) Protocadherin Gamma (pan) Antibody. (D) Composite.



Western Blot
Western Blot of Anti-Protocadherin Gamma Monoclonal Antibody.
Load: 10 µg. Lane 1: Molecular Weight marker MW. Lane 2: Rat Brain.
Primary Antibody: Mouse Anti-Protocadherin Gamma Monoclonal Antibody at 1:1000 for 1 hour at RT.
Secondary Antibody: Goat Anti-Mouse HRP at 1:200 for 1 hour at RT.
Predicted/Observed Size: ~100 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.