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

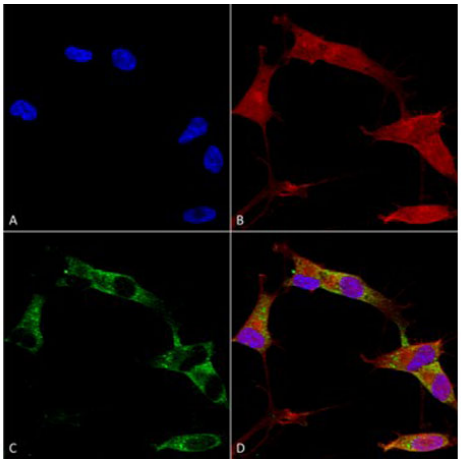
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1mg/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

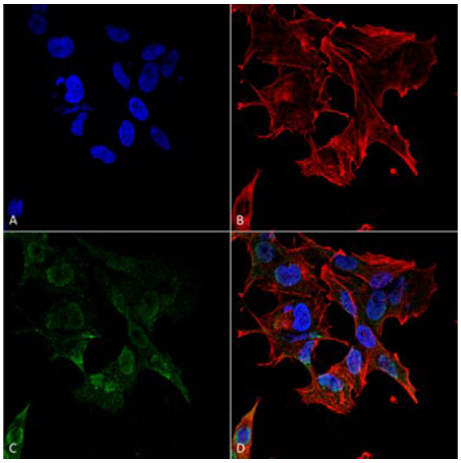
Shipping & Handling

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.

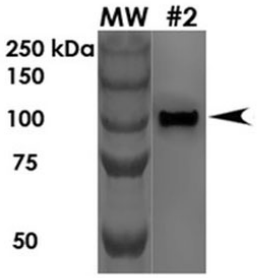
Images



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.

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