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Datasheet for ABIN1741191

anti-Protocadherin gamma antibody (AA 808-931) (FITC)

3 Images

Overview

Quantity:	100 µg
Target:	Protocadherin gamma
Binding Specificity:	AA 808-931
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Protocadherin gamma antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	Fusion protein corresponding to amino acids 808-931 (C-terminal cytoplasmic constant domain) of mouse Protocadherin-gamma-A1 that is shared by all 22 Gamma-protocadherins (A subfamily amino acids ~807-930, B subfamily amino acids ~789-912 and C subfamily amino acids ~818-941). 99% identity with human (123/124 amino acids).
Clone:	S159-5
Isotype:	IgG1
Specificity:	Detects ~100 kDa. Cross-reacts with all Gamma-protocadherin-A, -B and -C proteins.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target: Protocadherin gamma

Abstract: [Protocadherin gamma Products](#)

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.

Gene ID: 93709

NCBI Accession: [NP_291062](#)

UniProt: [Q91XZ0](#)

Application Details

Application Notes:

- WB (1:1000)
- ICC/IF (1:100)
- optimal dilutions for assays should be determined by the user.

Comment: 1 µg/ml of ABIN1741191 was sufficient for detection of Protocadherin gamma (pan) in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Restrictions: For Research Use only

Handling

Format: Liquid

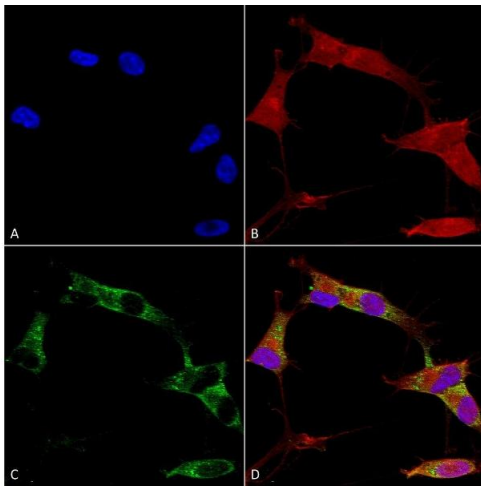
Concentration: 1 mg/mL

Buffer: PBS pH 7.4, 50 % glycerol, 0.1 % sodium azide, Storage buffer may change when conjugated

Handling

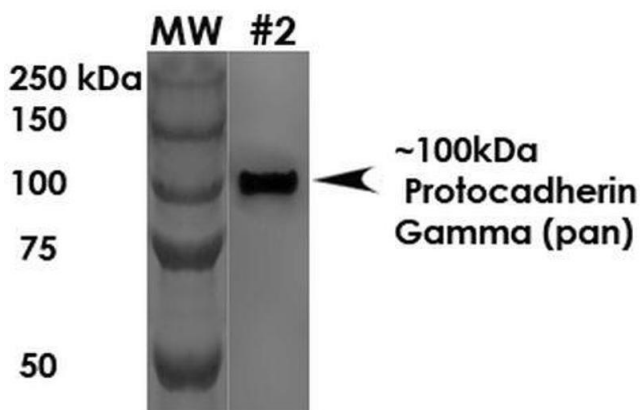
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



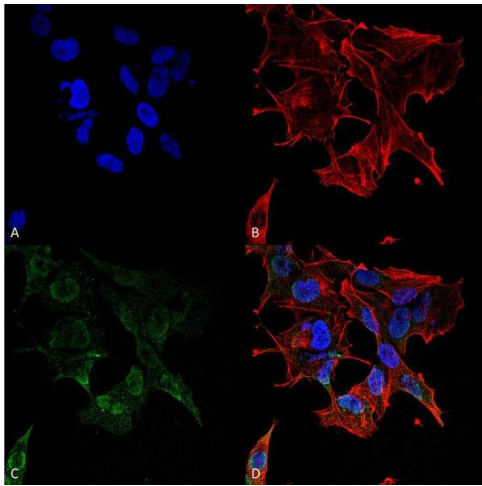
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody, Clone S159-5 (ABIN1741191). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody (ABIN1741191) at 1:100 for overnight at 4 °C with slow rocking. 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, 1.6 mM 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.



Western Blotting

Image 2. Western Blot analysis of Rat Brain Membrane showing detection of ~100 kDa Protocadherin Gamma protein using Mouse Anti-Protocadherin Gamma Monoclonal Antibody, Clone S159-5 . Load: 10 µg. 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.



Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody, Clone S159-5 . 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.