

Datasheet for ABIN1741192

**anti-Protocadherin gamma antibody (AA 808-931) (HRP)**[Go to Product page](#)**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 HRP  |
| 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:       | <a href="#">Protocadherin gamma Products</a>  |
| Background:     | <p>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.</p> |
| Gene ID:        | 93709   |
| NCBI Accession: | <a href="#">NP_291062</a>   |
| UniProt:        | <a href="#">Q91XZ0</a>  |

## Application Details

|                    |  |
|--------------------|--|
| Application Notes: | <ul style="list-style-type: none"><li>• WB (1:1000)</li><li>• ICC/IF (1:100)</li><li>• optimal dilutions for assays should be determined by the user.</li></ul>  |
| Comment:           | 1 µg/ml of ABIN1741192 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  |

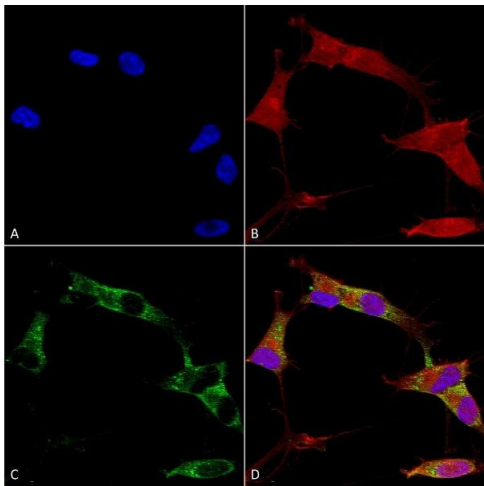
## Handling

|                |  |
|----------------|--|
| 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

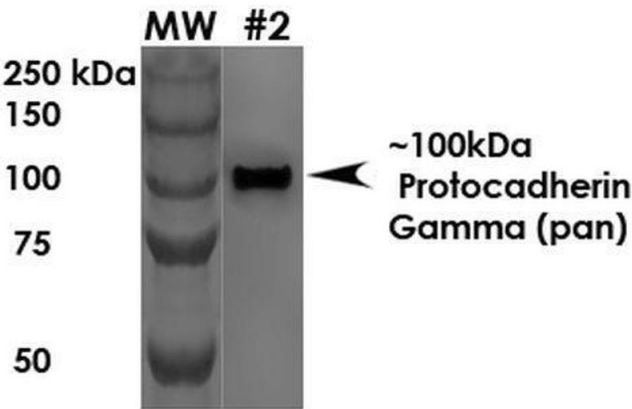


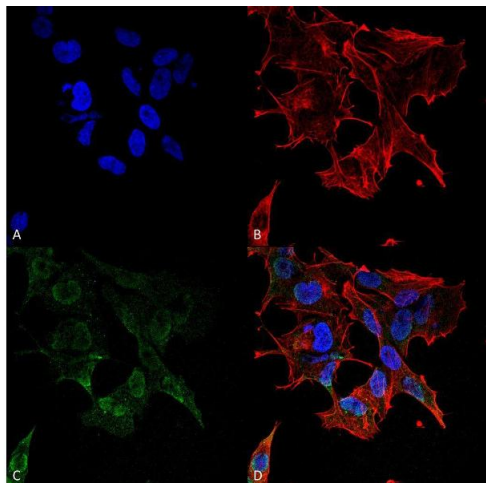
Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody, Clone S159-5 (ABIN1741192). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-Protocadherin Gamma (pan) Monoclonal Antibody (ABIN1741192) 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.