

**Protocadherin Gamma A (pan) Antibody**  
**Protocadherin Gamma A Antibody, Clone S144-32**  
**Catalog # ASM10287**

### Specification

#### Protocadherin Gamma A (pan) Antibody - Product Information

Application	WB, ICC
Primary Accession	<a href="#">Q91XY5</a>
Other Accession	<a href="#">NP_291064.1</a>
Host	Mouse
Isotype	IgG2b
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

#### Description

Mouse Anti-Mouse Protocadherin Gamma A (pan) Monoclonal IgG2b

#### Target/Specificity

Detects ~100kDa. Cross-reacts with other Gamma protocadherin-A proteins. No cross-reactivity against Gamma protocadherin-B or -C proteins.

#### Other Names

PCDH gamma A Antibody, PCDH-gamma-A Antibody, PCDHGA Antibody, Protocadherin gamma A Antibody, Protocadherin gamma subfamily A Antibody, Gamma Protocadherin A (pan) Antibody, Pan-Gamma-Protocadherin-A Antibody, Pan Gamma Protocadherin A Antibody

#### Immunogen

Fusion protein amino acids 720-804 (variable cytoplasmic domain) of mouse Gamma-protocadherin-A3. Human: 80% identity (68/84 amino acids identical) >75% identity with other Gamma-protocadherin-A proteins

#### Purification

Protein G Purified

#### Storage

-20°C

#### Storage Buffer

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

#### Shipping Temperature

Blue Ice or 4°C

#### Certificate of Analysis

1 µg/ml of SMC-453 was sufficient for detection of Protocadherin Gamma A (pan) in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

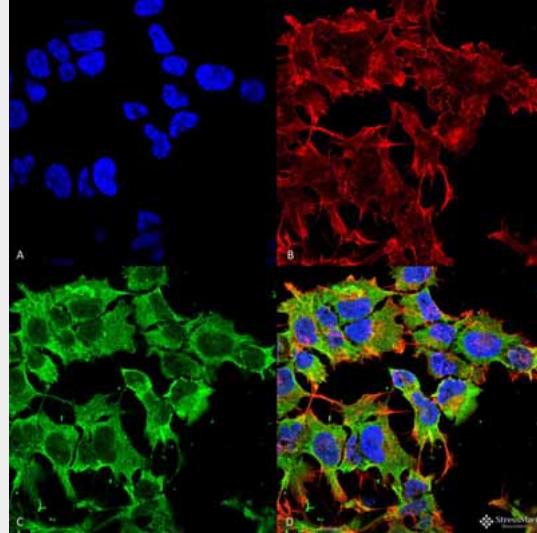
#### Cellular Localization

Cell Membrane

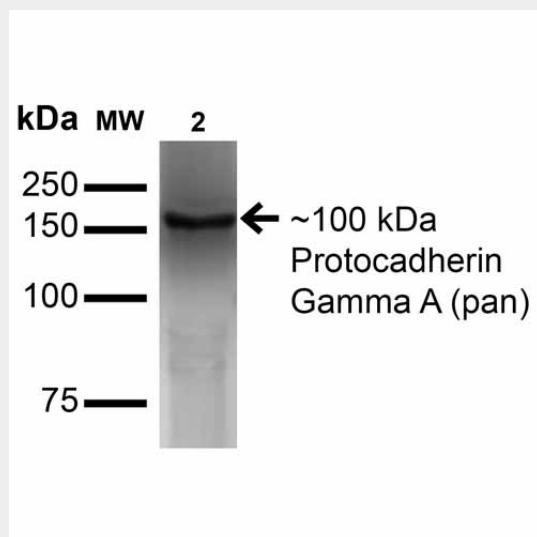
#### Protocadherin Gamma A (pan) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Protocadherin Gamma A (pan) Antibody - Images**

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Protocadherin Gamma A (pan) Monoclonal Antibody, Clone S144-32 (ASM10287). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Protocadherin Gamma A (pan) Monoclonal Antibody (ASM10287) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Protocadherin Gamma A (pan) Antibody (D) Composite.



Western Blot analysis of Monkey COS cells transfected with GFP-tagged Gamma-protocadherin-A3

showing detection of ~100 kDa Protocadherin Gamma A (pan) protein using Mouse Anti-Protocadherin Gamma A (pan) Monoclonal Antibody, Clone S144-32 (ASM10287). Lane 1: Molecular Weight Ladder. Lane 2: Monkey COS cells transfected with GFP-tagged Gamma-protocadherin-A3. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Protocadherin Gamma A (pan) Monoclonal Antibody (ASM10287) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~100 kDa.

### **Protocadherin Gamma A (pan) Antibody - 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.