10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Protocadherin Gamma A (pan) Antibody

Protocadherin Gamma A Antibody, Clone S144-32

Catalog # ASM10287

Specification

Protocadherin Gamma A (pan) Antibody - Product Information

Application	ICC/IF, WB
Primary Accession	Q91XY5
Other Accession	NP_291064.1
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

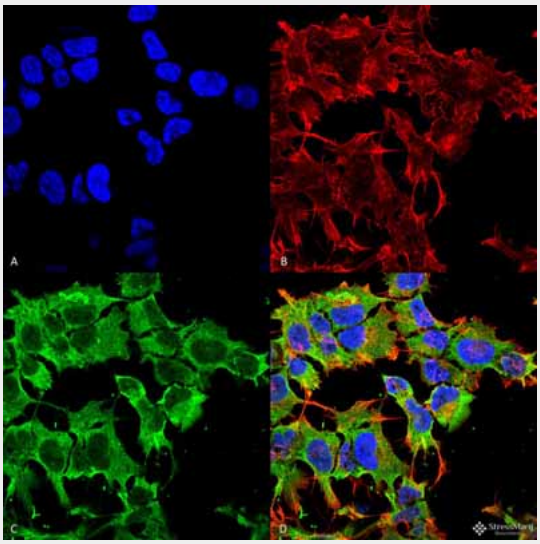
Immunogen
Fusion protein amino acids 720-804 (variable cytoplasmic domain) of mouse Gamma-protocadherin-A3. Human: 80% identity (68/84 amino acids identical) >75% identity with other Gamma-protocadherin-A proteins

Purification
Protein G Purified

Storage	-20ºC

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

Shipping Temperature	Blue Ice or 4ºC



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.

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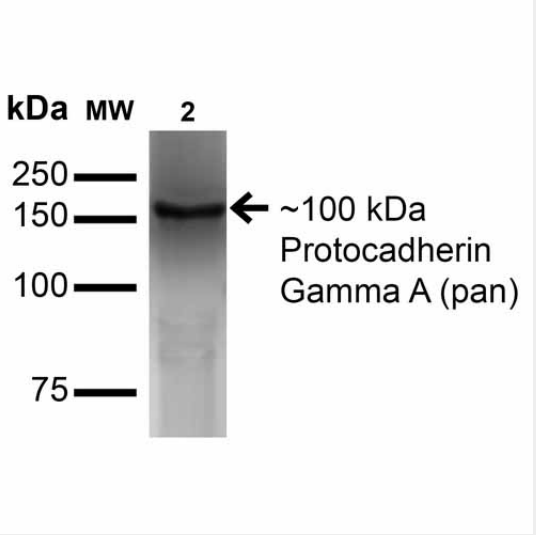
Certificate of Analysis
1 µg/ml of SMC-453 was sufficient for detection of Protocadherin Gamma A (pan) in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

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 Cytomety
- Cell Culture



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.