

Protocadherin Gamma A3 Antibody
Protocadherin Gamma A3 Antibody, Clone S144-17
Catalog # ASM10285

Specification

Protocadherin Gamma A3 Antibody - Product Information

Application	WB, ICC
Primary Accession	Q91XY5
Other Accession	NP_291064.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse
Clonality	Monoclonal

Description

Mouse Anti-Mouse Protocadherin Gamma A3 Monoclonal IgG1

Target/Specificity

Detects ~100kDa. No cross-reactivity against other Protocadherin Gamma -A, -B or -C proteins.

Other Names

PCDHGA3 Antibody, PCDG3 Antibody, PCDH gamma A3 Antibody, Protocadherin gamma subfamily A 3 Antibody, Protocadherin gamma-A3 Antibody, Gamma Protocadherin-A3 Antibody, Gamma-Protocadherin-A3 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 protein.

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-451 was sufficient for detection of Protocadherin Gamma A3 in 20 µg of COS cell lysate (transiently transfected with GFP-tagged Protocadherin Gamma A3) by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

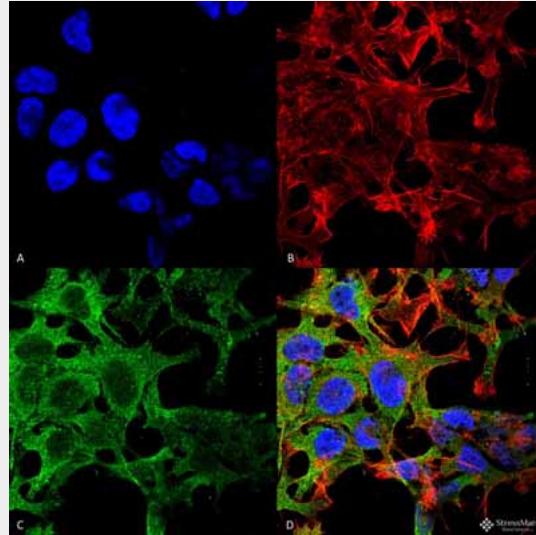
Cellular Localization

Cell Membrane

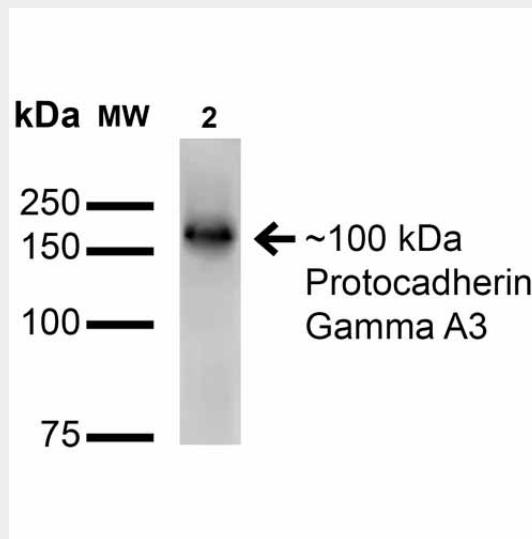
Protocadherin Gamma A3 Antibody - Protocols

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 A3 Antibody - Images

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Protocadherin Gamma A3 Monoclonal Antibody, Clone S144-17 (ASM10285). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Protocadherin Gamma A3 Monoclonal Antibody (ASM10285) 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 A3 Antibody (D) Composite.



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

showing detection of ~100 kDa Protocadherin Gamma A3 protein using Mouse Anti-Protocadherin Gamma A3 Monoclonal Antibody, Clone S144-17 (ASM10285). 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 A3 Monoclonal Antibody (ASM10285) 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 A3 Antibody - Background

Protocadherins are a large family of cadherin-like cell adhesion proteins that are involved in the establishment and maintenance of neuronal connections in the brain. There are three protocadherin (PCDH) gene clusters, designated alpha, beta and gamma, all of which contain multiple tandemly arranged genes. PCDHGA3 (Protocadherin gamma-A3) is a 932 amino acid that is one of 22 proteins encoded by the protocadherin gamma cluster. The protocadherein gamma cluster consists of three subfamilies (A, B and C) and PCDHGA3 is a member of the gamma subfamily A.

PCDHGA3 is a type I transmembrane receptor containing six cadherin motifs and is expressed in the central nervous system where it localizes to synapses. Members of the gamma cluster of protocadherins are essential for neuronal survival. There are two isoforms of PCDHGA3 that are produced as a result of alternative splicing events.