

**AM60060PU-N****Monoclonal Antibody to PCDHG pan (808-931, Cytopl. Dom.) - Purified**

<b>Alternate names:</b>	Gamma protocadherin, PCDH gamma, Protocadherin gamma
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	<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>
<b>Uniprot ID:</b>	<a href="#">Q91XZ0</a>
<b>NCBI:</b>	<a href="#">NP_291062.1</a>
<b>GeneID:</b>	<a href="#">93709</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM20P (for use in rat samples), AM03095PU-N
<b>Clone:</b>	S159-5
<b>Immunogen:</b>	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).
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Protein G Chromatography <b>Buffer System:</b> PBS pH 7.4, 50% Glycerol, 0.09% Sodium Azide
<b>Applications:</b>	<b>Western blot:</b> 1/1000, 1 µg/ml was sufficient for detection of PCDHG (pan) in 20 µg of Rat brain lysate by colorimetric immunoblot analysis using HRP conjugated secondary antibody. <b>Immunocytochemistry.</b>

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

<b>Specificity:</b>	<p>This antibody detects a ~100 kDa protein. Cross-reacts with all Gamma- protocadherin-A, -B and -C proteins.  <b>Species:</b> Mouse and Rat.                  Other species not tested.</p>
<b>Storage:</b>	<p>Upon receipt, store undiluted (in aliquots) at -20°C.                  Avoid repeated freezing and thawing.                  Shelf life: One year from despatch.</p>
<b>Pictures:</b>	<p>Western blot of rat brain membrane lysates showing the detection of ~100 kDa.                  Protocadherin Gamma (pan) protein using Anti-Protocadherin Gamma (pan) Antibody [S159-5] (Cat.-No AM60060PU).                  Lane 1: MW ladder. Lane 2: Anti-Protocadherin Gamma (pan) (1:1000).                  Load: 10 µg RBM per lane. Block: 5% milk + TBST O/N at 4°C. Primary antibody: Mouse Anti- Protocadherin Gamma (pan) monoclonal antibody [S159-5] (Cat.-No AM60060PU) incubated for 60 min at RT. Secondary antibody: Goat Anti-Mouse HRP antibody at 1:200 for 60min at RT. Development: ECL solution for 6min at RT. Predicted/Observed size: ~ 100 kDa. Other band(s):~None.</p>

