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PCDHGA5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PCDHGA5.
Catalog # AT3228a

Product Information

Application	WB, E
Primary Accession	Q9Y5G8
Other Accession	NM_018918
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5H5
Calculated MW	100935

Additional Information

Gene ID	56110
Other Names	Protocadherin gamma-A5, PCDH-gamma-A5, PCDHGA5
Target/Specificity	PCDHGA5 (NP_061741, 205 a.a. ~ 304 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PCDHGA5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

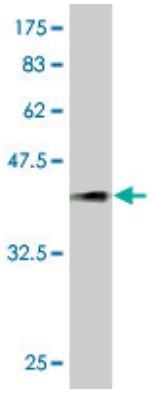
Background

This gene is a member of the protocadherin gamma gene cluster, 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.

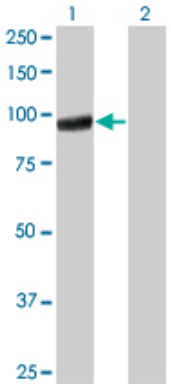
References

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.Comparative DNA sequence analysis of mouse and human protocadherin gene clusters. Wu Q, et al. Genome Res, 2001 Mar. PMID 11230163.Phylogenetic analysis of the cadherin superfamily allows identification of six major subfamilies besides several solitary members. Nollet F, et al. J Mol Biol, 2000 Jun 9. PMID 10835267.Cadherin superfamily genes: functions, genomic organization, and neurologic diversity. Yagi T, et al. Genes Dev, 2000 May 15. PMID 10817752.Large exons encoding multiple ectodomains are a characteristic feature of protocadherin genes. Wu Q, et al. Proc Natl Acad Sci U S A, 2000 Mar 28. PMID 10716726.

Images

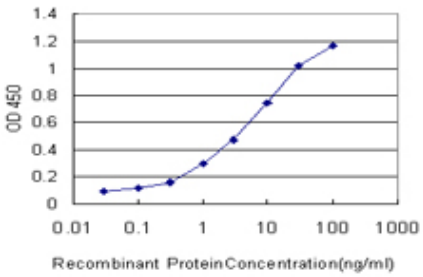


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Western Blot analysis of PCDHGA5 expression in transfected 293T cell line by PCDHGA5 monoclonal antibody (M01), clone 5H5.

Lane 1: PCDHGA5 transfected lysate(100.935 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged PCDHGA5 is approximately 0.1ng/ml as a capture antibody.