10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PCDHAC2 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant PCDHAC2.
Catalog # AT3221a

Product Information

Application	WB
Primary Accession	Q9Y5I4
Other Accession	NM_018899
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3D12
Calculated MW	109450

Additional Information

Gene ID	56134
Other Names	Protocadherin alpha-C2, PCDH-alpha-C2, PCDHAC2
Target/Specificity	PCDHAC2 (NP_061722, 81 a.a. ~ 190 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
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	PCDHAC2 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

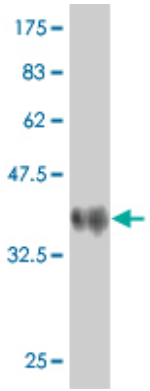
Background

This gene is a member of the protocadherin alpha gene cluster, one of three related gene clusters tandemly linked on chromosome five that demonstrate an unusual genomic organization similar to that of B-cell and T-cell receptor gene clusters. The alpha gene cluster is composed of 15 cadherin superfamily genes related to the mouse CNR genes and consists of 13 highly similar and 2 more distantly related coding sequences. The tandem array of 15 N-terminal exons, or variable exons, are followed by downstream C-terminal exons, or constant exons, which are shared by all genes in the cluster. The large, uninterrupted N-terminal exons each encode six cadherin ectodomains while the C-terminal exons encode the cytoplasmic domain. These neural cadherin-like cell adhesion proteins are integral plasma membrane proteins that most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been observed and additional variants have been suggested but their full-length nature has yet to be determined.

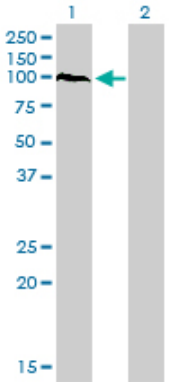
References

Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.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.

Images

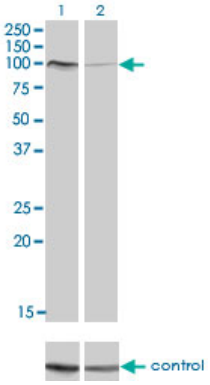


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



Western Blot analysis of PCDHAC2 expression in transfected 293T cell line by PCDHAC2 monoclonal antibody (M03), clone 3D12.

Lane 1: PCDHAC2 transfected lysate(96.2 KDa).
Lane 2: Non-transfected lysate.



Western blot analysis of PCDHAC2 over-expressed 293 cell line, cotransfected with PCDHAC2 Validated Chimera RNAi ((Cat # AT3221a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.