

# PCDHB12 Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant PCDHB12.

Catalog # AT3223a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q9Y5F1</a>
<b>Other Accession</b>	<a href="#">NM_018932</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2a Kappa
<b>Clone Names</b>	1D11
<b>Calculated MW</b>	86770

## Additional Information

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<b>Gene ID</b>	56124
<b>Other Names</b>	Protocadherin beta-12, PCDH-beta-12, PCDHB12
<b>Target/Specificity</b>	PCDHB12 (NP_061755, 301 a.a. ~ 400 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	PCDHB12 Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

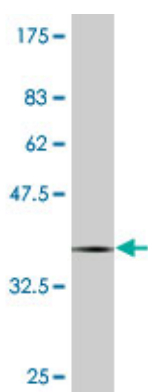
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This gene is a member of the protocadherin beta gene cluster, one of three related gene clusters tandemly linked on chromosome five. The gene clusters demonstrate an unusual genomic organization similar to that of B-cell and T-cell receptor gene clusters. The beta cluster contains 16 genes and 3 pseudogenes, each encoding 6 extracellular cadherin domains and a cytoplasmic tail that deviates from others in the cadherin superfamily. The extracellular domains interact in a homophilic manner to specify differential cell-cell connections. Unlike the alpha and gamma clusters, the transcripts from these genes are made up of only one large exon, not sharing common 3' exons as expected. These neural cadherin-like cell adhesion proteins are integral plasma membrane proteins. Their specific functions are unknown but they most likely play a critical role in the establishment and function of specific cell-cell neural connections.

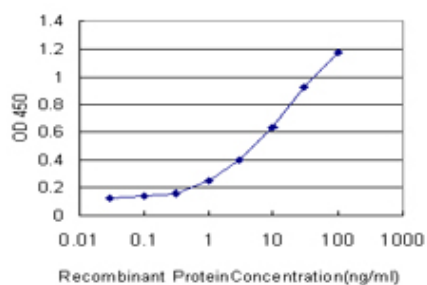
## References

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. *Genome Res*, 2004 Oct. PMID 15489334. 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. The human and murine protocadherin-beta one-exon gene families show high evolutionary conservation, despite the difference in gene number. Vanhalst K, et al. *FEBS Lett*, 2001 Apr 20. PMID 11322959. 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.

## Images



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



Detection limit for recombinant GST tagged PCDHB12 is approximately 0.1 ng/ml as a capture antibody.

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