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PCDHAC2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12157C

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	Q9Y5I4
Other Accession	NP_114089.1, NP_061722.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31967
Calculated MW	109450
Antigen Region	616-644

Additional Information

Gene ID	56134
Other Names	Protocadherin alpha-C2, PCDH-alpha-C2, PCDHAC2
Target/Specificity	This PCDHAC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 616-644 amino acids from the Central region of human PCDHAC2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PCDHAC2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PCDHAC2
Function	Potential calcium-dependent cell-adhesion protein. May be involved in the establishment and maintenance of specific neuronal connections in the brain.

Cellular Location Cell membrane; Single-pass type I membrane protein

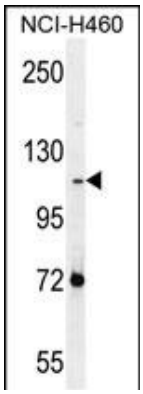
Background

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.

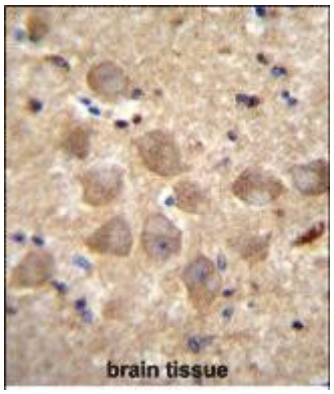
References

Wu, Q., et al. Genome Res. 11(3):389-404(2001)
Nollet, F., et al. J. Mol. Biol. 299(3):551-572(2000)
Yagi, T., et al. Genes Dev. 14(10):1169-1180(2000)
Wu, Q., et al. Proc. Natl. Acad. Sci. U.S.A. 97(7):3124-3129(2000)
Sugino, H., et al. Genomics 63(1):75-87(2000)

Images

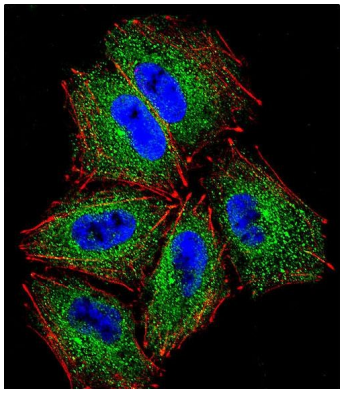


PCDHAC2 Antibody (Center) (Cat. #AP12157c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the PCDHAC2 antibody detected the PCDHAC2 protein (arrow).

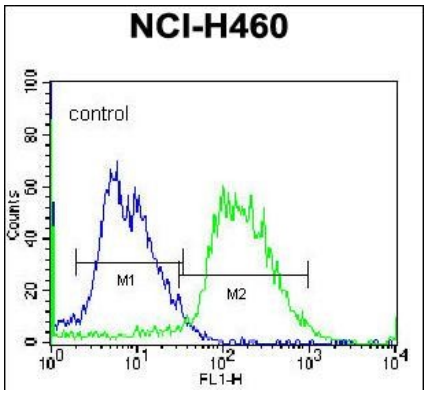


PCDHAC2 Antibody (Center) (Cat. #AP12157c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PCDHAC2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of PCDHAC2 Antibody (Center)(Cat#AP12157c) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa



Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



PCDHAC2 Antibody (Center) (Cat. #AP31967) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.