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CDH4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1401A

Product Information

Application	IHC-P, IF, FC, WB, E
Primary Accession	P55283
Other Accession	Q63149, P39038
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB13654
Calculated MW	100281
Antigen Region	175-203

Additional Information

Gene ID	1002
Other Names	Cadherin-4, Retinal cadherin, R-CAD, R-cadherin, CDH4
Target/Specificity	This CDH4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 175-203 amino acids from the N-terminal region of human CDH4.
Dilution	IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 WB~~1:1000 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	CDH4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDH4
Function	Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting

	cells; cadherins may thus contribute to the sorting of heterogeneous cell types. May play an important role in retinal development.
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed mainly in brain but also found in other tissues

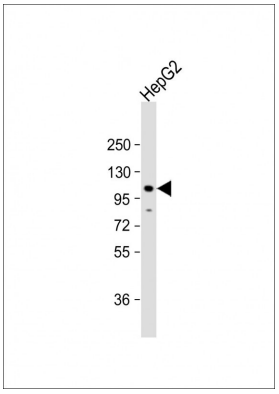
Background

CDH4 is a classical cadherin from the cadherin superfamily. It is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Based on studies in chicken and mouse, this cadherin is thought to play an important role during brain segmentation and neuronal outgrowth. In addition, a role in kidney and muscle development is indicated. Of particular interest are studies showing stable cis-heterodimers of cadherins 2 and 4 in cotransfected cell lines. Previously thought to interact in an exclusively homophilic manner, this is the first evidence of cadherin heterodimerization.

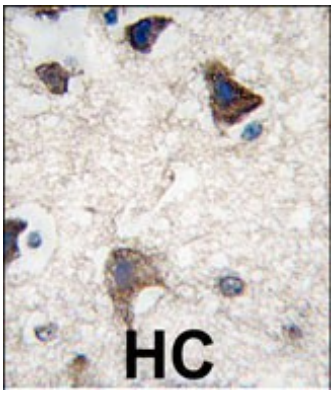
References

Miotto,E., Cancer Res. 64 (22), 8156-8159 (2004)
Johnson,E., J. Biol. Chem. 279 (30), 31041-31049 (2004)
Kitagawa,M., Biochem. Biophys. Res. Commun. 271 (2), 358-363 (2000)

Images

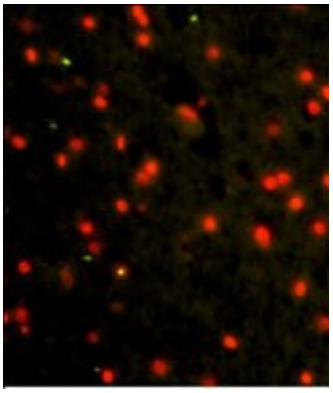


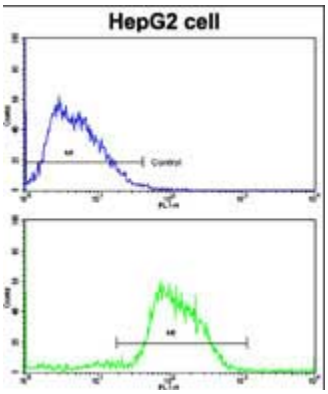
Anti-CDH4 Antibody (N-term) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 100 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CDH4 antibody (N-term) (Cat.#AP1401a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Immunofluorescence analysis of CDH4 Antibody (N-term) Antibody with paraffin-embedded human brain tissue . 0.025 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit lgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.





Flow cytometric analysis of HepG2 cells using CDH4 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Expression and Prognostic Significance of Cadherin 4 (CDH4) in Renal Cell Carcinoma
- Novel target genes responsive to the anti-growth activity of triptolide in endometrial and ovarian cancer cells.

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