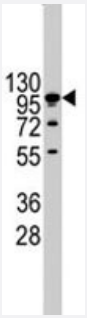
CDH4 polyclonal antibody

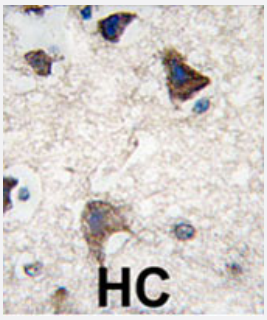
Catalog # PAB1864 Size 400 uL

Applications



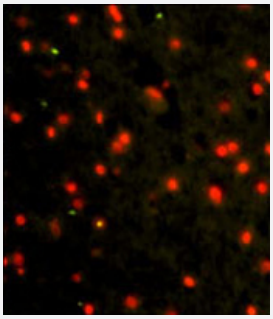
Western Blot (Cell lysate)

Western blot analysis of CDH4 polyclonal antibody (Cat # PAB1864) in HepG2 cell line lysates (35 ug/lane). CDH4 (arrow) was detected using the purified polyclonal antibody.



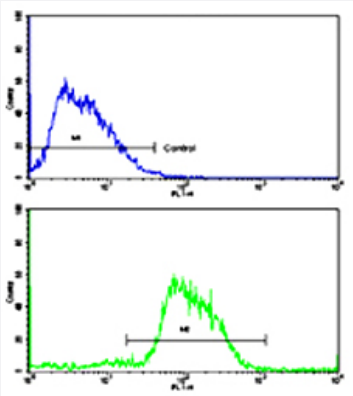
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with CDH4 polyclonal antibody (Cat # PAB1864), 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

Immunofluorescence analysis of CDH4 polyclonal antibody (Cat # PAB1864) in human brain tissue. Primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.



Flow Cytometry

Flow cytometric analysis of HepG2 cells using CDH4 polyclonal antibody (Cat # PAB1864)(bottom histogram) compared to a negative control cell (top histogram).
FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CDH4.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human CDH4.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation
Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) Immunofluorescence (1:10-50) Flow cytometry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Gene Info — CDH4

Entrez GeneID	1002
Protein Accession#	NP_001785;P55283
Gene Name	CDH4
Gene Alias	CAD4, FLJ22202, FLJ40547, MGC126700, MGC138355, RCAD
Gene Description	cadherin 4, type 1, R-cadherin (retinal)
Omim ID	603006
Gene Ontology	Hyperlink
Gene Summary	This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium -dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a tran smembrane region and a highly conserved cytoplasmic tail. Based on studies in chicken and mou se, this cadherin is thought to play an important role during brain segmentation and neuronal outgr owth. In addition, a role in kidney and muscle development is indicated. Of particular interest are s tudies showing stable cis-heterodimers of cadherins 2 and 4 in cotransfected cell lines. Previousl y thought to interact in an exclusively homophilic manner, this is the first evidence of cadherin hete rodimerization. [provided by RefSeq
Other Designations	OTTHUMP00000031444|R-cadherin|cadherin 4, type 1|cadherin 4, type 1, preproprotein|retinal c adherin

Publication Reference

- CDH4 inhibits ferroptosis in oral squamous cell carcinoma cells.

  Jian Xie, Ting Lan, Da-Li Zheng, Lin-Can Ding, You-Guang Lu.

  BMC Oral Health 2023 May; 23(1):329.

  Application: WB-Ce, Human, Oral squamous cell carcinoma, CAL27, HN30, HN6 and SCC9 cells

- CDH4 is a novel determinant of osteosarcoma tumorigenesis and metastasis.

  Tang Q, Lu J, Zou C, Shao Y, Chen Y, Narala S, Fang H, Xu H, Wang J, Shen J, Khokha R.

  Oncogene 2018 Apr; [Epub].

  Application: IHC-P, Human, Osteosarcoma

- Frequent aberrant methylation of the CDH4 gene promoter in human colorectal and gastric cancer.

  Miotto E, Sabbioni S, Veronese A, Calin GA, Gullini S, Liboni A, Gramantieri L, Bolondi L, Ferrazzi E, Gafa R, Lanza G, Negrini M.

  Cancer Research 2004 Nov; 64(22):8156.

- R-cadherin influences cell motility via Rho family GTPases.

  Johnson E, Theisen CS, Johnson KR, Wheelock MJ.

  The Journal of Biological Chemistry 2004 Jul; 279(30):31041.

  Application: IF, Human, A-431 cells

- Mutation analysis of cadherin-4 reveals amino acid residues of EC1 important for the structure and function.

  Kitagawa M, Natori M, Murase S, Hirano S, Taketani S, Suzuki ST.

  Biochemical and Biophysical Research Communications 2000 May; 271(2):358.

  Application: IF, Mouse, L cells

Pathway

- Cell adhesion molecules (CAMs)

Disease

- Cerebral Hemorrhage

- Chronic Disease
- Genetic Predisposition to Disease
- Hypertension
- Intracranial Hemorrhages
- Kidney Diseases
- Stroke
- Subarachnoid Hemorrhage
- Tobacco Use Disorder