

MUPCDH Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14343a

Product Information

Application	WB, E
Primary Accession	<u>Q9HBB8</u>
Other Accession	NP_001165439.1, NP_068743.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31374
Calculated MW	88223
Antigen Region	131-160

Additional Information

Gene ID	53841
Other Names	Cadherin-related family member 5, Mu-protocadherin, Mucin and cadherin-like protein, CDHR5, MUCDHL, MUPCDH
Target/Specificity	This MUPCDH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 131-160 amino acids from the N-terminal region of human MUPCDH.
Dilution	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	MUPCDH Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDHR5 (<u>HGNC:7521</u>)
Function	Intermicrovillar adhesion molecule that forms, via its extracellular domain, calcium-dependent heterophilic complexes with CDHR2 on adjacent microvilli. Thereby, controls the packing of microvilli at the apical membrane of

	epithelial cells. Through its cytoplasmic domain, interacts with microvillus cytoplasmic proteins to form the intermicrovillar adhesion complex/IMAC. This complex plays a central role in microvilli and epithelial brush border differentiation.
Cellular Location	Apical cell membrane; Single-pass type I membrane protein. Cell projection, microvillus membrane; Single-pass type I membrane protein
Tissue Location	Highest expression in kidney, liver, colon and small intestine. In kidney, expressed apically along brush border of proximal convoluted tubule but not in cortical collecting ducts Isoform 1 is expressed primarily in adult small intestine and colon Isoform 2 is highly expressed in fetal liver (PubMed:12167596) Expressed in duodenum with higher expression in enterocytes along the villus axis and lower expression in crypts (at protein level) (PubMed:24725409).

Background

This gene is a novel mucin-like gene that is a member of the cadherin superfamily. While encoding nonpolymorphic tandem repeats rich in proline, serine and threonine similar to mucin proteins, the gene also contains sequence encoding calcium-binding motifs found in all cadherins. The role of the hybrid extracellular region and the specific function of this protein have not yet been determined. Alternatively spliced transcript variants encoding different isoforms have been described.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Goldberg, M., et al. Hum. Genet. 112(4):334-342(2003) Goldberg, M., et al. Am. J. Physiol. Renal Physiol. 283 (3), F454-F463 (2002) : Paris, M.J., et al. Genomics 69(2):196-202(2000)

Images



MUPCDH Antibody (N-term) (Cat. #AP14343a) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the MUPCDH antibody detected the MUPCDH protein (arrow).

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