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PNN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11555C

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q9H307
Other Accession	O35691, P79122, NP_002678.2
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17516
Calculated MW	81628
Antigen Region	209-239

Additional Information

Gene ID	5411
Other Names	Pinin, 140 kDa nuclear and cell adhesion-related phosphoprotein, Desmosome-associated protein, Domain-rich serine protein, DRS protein, DRSP, Melanoma metastasis clone A protein, Nuclear protein SDK3, SR-like protein, PNN, DRS, MEMA
Target/Specificity	This PNN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 209-239 amino acids from the Central region of human PNN.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	PNN Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PNN

Synonyms	DRS, MEMA
Function	Transcriptional activator binding to the E-box 1 core sequence of the E-cadherin promoter gene; the core-binding sequence is 5'CAGGTG-3'. Capable of reversing CTBP1-mediated transcription repression. Auxiliary component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Participates in the regulation of alternative pre-mRNA splicing. Associates to spliced mRNA within 60 nt upstream of the 5'-splice sites. Component of the PSAP complex which binds RNA in a sequence-independent manner and is proposed to be recruited to the EJC prior to or during the splicing process and to regulate specific excision of introns in specific transcription subsets. Involved in the establishment and maintenance of epithelia cell-cell adhesion. Potential tumor suppressor for renal cell carcinoma.
Cellular Location	Nucleus speckle. Cell junction, desmosome. Note=Cell-cell contact area, predominantly desmosome of intercellular adherens junction. Not a nucleocytoplasmic shuttling protein
Tissue Location	Expressed in placenta, lung, liver, kidney, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon, heart, epidermis, esophagus, brain and smooth and skeletal muscle. Expressed strongly in melanoma metastasis lesions and advanced primary tumors.

Background

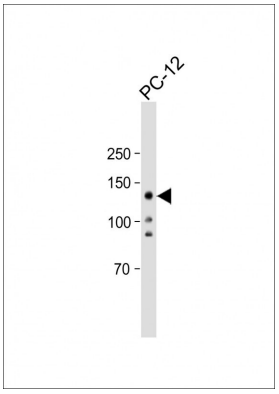
Transcriptional activator binding to the E-box 1 core sequence of the E-cadherin promoter gene; the core-binding sequence is 5'CAGGTG-3'. Capable of reversing CTBP1-mediated transcription repression. Component of a splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of a few core proteins and several more peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Participates in the regulation of alternative pre-mRNA splicing. Associates to spliced mRNA within 60 nt upstream of the 5'-splice sites. Involved in the establishment and maintenance of epithelia cell-cell adhesion. Potential tumor suppressor for renal cell carcinoma.

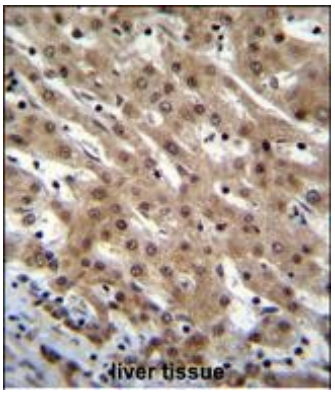
References

Bailey, S.D., et al. Diabetes Care (2010) In press :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Alpatov, R., et al. Mol. Cell. Biol. 28(5):1584-1595(2008)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Matsuoka, S., et al. Science 316(5828):1160-1166(2007)

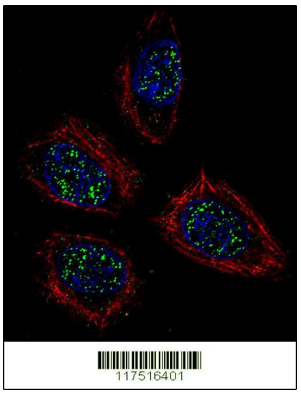
Images

All lanes: Anti-PNN Antibody (Center) at 1:250 dilution + PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 130 KDa Blocking/Dilution buffer: 5% NFDM/TBST.





PNN Antibody (Center) (Cat. #AP11555c)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PNN Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of PNN Antibody (Center)(Cat#AP11555c) 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).