

Anti-Plectin Picoband Antibody

Catalog # ABO12120

Product Information

Application	WB, IHC-P
Primary Accession	Q15149
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Plectin(PLEC) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5339
Other Names	Plectin, PCN, PLTN, Hemidesmosomal protein 1, HD1, Plectin-1, PLEC, PLEC1
Calculated MW	531791
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Rat
Subcellular Localization	Cytoplasm, cytoskeleton . Cell junction, hemidesmosome .
Tissue Specificity	Widely expressed with highest levels in muscle, heart, placenta and spinal cord.
Source	Eukaryota
Protein Name	Plectin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Plectin (2644-2671aa RFIEQEKAKLEQLFQDEVAKAQQLREEQ), different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the plakin or cytolinker family.

Protein Information

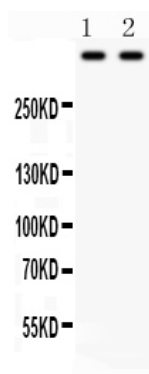
Name	PLEC
Synonyms	PLEC1
Function	Interlinks intermediate filaments with microtubules and microfilaments and anchors intermediate filaments to desmosomes or hemidesmosomes. Could also bind muscle proteins such as actin to membrane complexes in muscle. May be involved not only in the filaments network, but also in the regulation of their dynamics. Structural component of muscle. Isoform 9 plays a major role in the maintenance of myofiber integrity.
Cellular Location	Cytoplasm, cytoskeleton. Cell junction, hemidesmosome. Cell projection, podosome {ECO:0000250 UniProtKB:Q9QXS1}. Note=Localized to the cortex of myotube podosomes. {ECO:0000250 UniProtKB:Q9QXS1}
Tissue Location	Widely expressed with highest levels in muscle, heart, placenta and spinal cord

Background

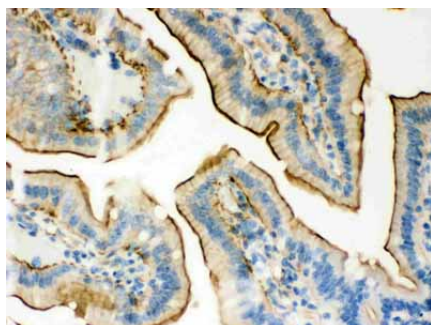
Plectin, known as PLEC, is a prominent member of an important family of structurally and in part functionally related proteins, termed plakins or cytolinkers, that are capable of interlinking different elements of the cytoskeleton. Plakins, with their multi-domain structure and enormous size, not only play crucial roles in maintaining cell and tissue integrity and orchestrating dynamic changes in cytoarchitecture and cell shape, but also serve as scaffolding platforms for the assembly, positioning, and regulation of signaling complexes. Plectin is expressed as several protein isoforms in a wide range of cell types and tissues from a single gene located on chromosome 8 in humans. The plectin gene locus in mouse on chromosome 15 has been analyzed in detail, revealing a genomic exon-intron organization with well over 40 exons spanning over 62 kb and an unusual 5' transcript complexity of plectin isoforms. Eleven exons (1-1j) have been identified that alternatively splice directly into a common exon 2 which is the first exon to encode plectin's highly conserved actin binding domain (ABD). Three additional exons (-1, 0a, and 0) splice into an alternative first coding exon (1c), and two additional exons (2alpha and 3alpha) are optionally spliced within the exons encoding the acting binding domain (exons 2-8). Analysis of the human locus has identified eight of the eleven alternative 5' exons found in mouse and rat; exons 1i, 1j and 1h have not been confirmed in human. Furthermore, isoforms lacking the central rod domain encoded by exon 31 have been detected in mouse, rat, and human. The short alternative amino-terminal sequences encoded by the different first exons direct the targeting of the various isoforms to distinct subcellular locations. As the expression of specific plectin isoforms was found to be dependent on cell type (tissue) and stage of development, it appears that each cell type (tissue) contains a unique set (proportion and composition) of plectin isoforms, as if custom-made for specific requirements of the particular cells. Concordantly, individual isoforms were found to carry out distinct and specific functions.

Images

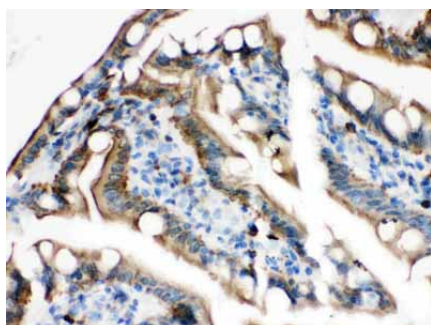
Anti- Plectin Picoband antibody, ABO12120, Western blottingAll lanes: Anti Plectin (ABO12120) at 0.5ug/mL
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: Rat Brain Tissue Lysate at 50ug
Predicted bind size: 532KD
Observed bind



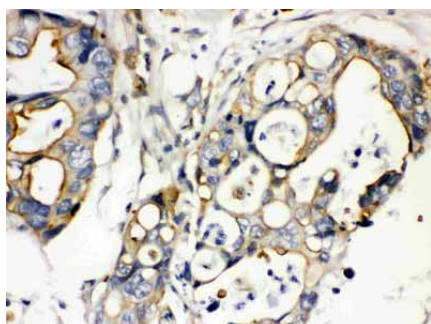
size: 532KD



Anti- Plectin Picoband antibody, ABO12120, IHC(P)IHC(P):
Mouse Intestine Tissue



Anti- Plectin Picoband antibody, ABO12120, IHC(P)IHC(P):
Rat Intestine Tissue



Anti- Plectin Picoband antibody, ABO12120, IHC(P)IHC(P):
Human Intestinal Cancer Tissue

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