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UNC5C Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6919c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O95185
Other Accession	Q761X5
Reactivity	Human
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21275
Calculated MW	103146
Antigen Region	188-217

Additional Information

Gene ID	8633
Other Names	Netrin receptor UNC5C, Protein unc-5 homolog 3, Protein unc-5 homolog C, UNC5C, UNC5H3
Target/Specificity	This UNC5C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 188-217 amino acids from the Central region of human UNC5C.
Dilution	WB~~1:2000 IHC-P~~1:100~500 FC~~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	UNC5C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	UNC5C
Synonyms	UNC5H3

Function	Receptor for netrin required for axon guidance (By similarity). Mediates axon repulsion of neuronal growth cones in the developing nervous system upon ligand binding (By similarity). NTN1/Netrin-1 binding might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed:28483977). Axon repulsion in growth cones may also be caused by its association with DCC that may trigger signaling for repulsion (By similarity). Might also collaborate with DSCAM in NTN1-mediated axon repulsion independently of DCC (By similarity). Also involved in corticospinal tract axon guidance independently of DCC (By similarity). Involved in dorsal root ganglion axon projection towards the spinal cord (PubMed:28483977). It also acts as a dependence receptor required for apoptosis induction when not associated with netrin ligand (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell surface. Synapse, synaptosome {ECO:0000250|UniProtKB:Q761X5}. Cell projection, axon {ECO:0000250|UniProtKB:O08747}. Cell projection, dendrite {ECO:0000250|UniProtKB:O08747}. Cell projection, growth cone {ECO:0000250|UniProtKB:O08747}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:O08747}. Cell projection, filopodium {ECO:0000250|UniProtKB:O08747}
Tissue Location	Mainly expressed in brain (PubMed:9782087). Expressed in temporal lobe cortical neurons and in neurons of the hippocampal pyramidal layer (PubMed:25419706). Also expressed in kidney (PubMed:9782087). Not expressed in developing or adult lung (PubMed:9782087).

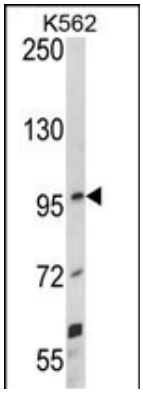
Background

UNC5C belongs to the UNC-5 family of netrin receptors. Netrins are secreted proteins that direct axon extension and cell migration during neural development. They are bifunctional proteins that act as attractants for some cell types and as repellents for others, and these opposite actions are thought to be mediated by two classes of receptors. The UNC-5 family of receptors mediate the repellent response to netrin; they are transmembrane proteins containing 2 immunoglobulin (Ig)-like domains and 2 type I thrombospondin motifs in the extracellular region.

References

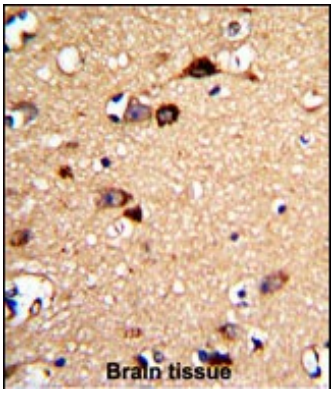
Hibi,K., et.al., World J Surg 33 (5), 1053-1057 (2009)

Images

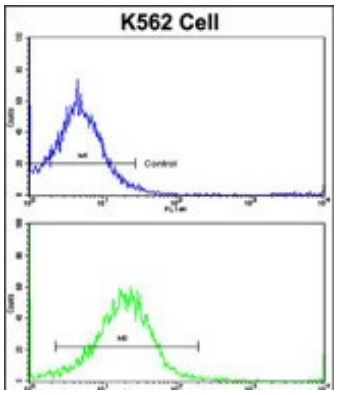


Western blot analysis of UNC5C Antibody (Center) (Cat. #AP6919c) in K562 cell line lysates (35ug/lane). UNC5C (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human brain



tissue with UNC5C Antibody (Center), 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.



Flow cytometric analysis of K562 cells using UNC5C Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.