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LIN7C Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12807b

Product Information

Application	IHC-P, WB, E
Primary Accession	Q9NUP9
Other Accession	Q792I0, O88952, Q0P5F3, NP_060832.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32322
Calculated MW	21834
Antigen Region	168-197

Additional Information

Gene ID	55327
Other Names	Protein lin-7 homolog C, Lin-7C, Mammalian lin-seven protein 3, MALS-3, Vertebrate lin-7 homolog 3, Veli-3, LIN7C, MALS3, VELI3
Target/Specificity	This LIN7C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-197 amino acids from the C-terminal region of human LIN7C.
Dilution	IHC-P~~1:100~500 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	LIN7C Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LIN7C
Synonyms	MALS3, VELI3

Function	Plays a role in establishing and maintaining the asymmetric distribution of channels and receptors at the plasma membrane of polarized cells. Forms membrane-associated multiprotein complexes that may regulate delivery and recycling of proteins to the correct membrane domains. The tripartite complex composed of LIN7 (LIN7A, LIN7B or LIN7C), CASK and APBA1 associates with the motor protein KIF17 to transport vesicles containing N-methyl-D-aspartate (NMDA) receptor subunit NR2B along microtubules (By similarity). This complex may have the potential to couple synaptic vesicle exocytosis to cell adhesion in brain. Ensures the proper localization of GRIN2B (subunit 2B of the NMDA receptor) to neuronal postsynaptic density and may function in localizing synaptic vesicles at synapses where it is recruited by beta- catenin and cadherin. Required to localize Kir2 channels, GABA transporter (SLC6A12) and EGFR/ERBB1, ERBB2, ERBB3 and ERBB4 to the basolateral membrane of epithelial cells.
Cellular Location	Cell membrane; Peripheral membrane protein. Basolateral cell membrane; Peripheral membrane protein. Cell junction Postsynaptic density membrane; Peripheral membrane protein. Cell junction, tight junction Note=Mainly basolateral in renal epithelial cells.

Background

LIN7C plays a role in establishing and maintaining the asymmetric distribution of channels and receptors at the plasma membrane of polarized cells. Forms membrane-associated multiprotein complexes that may regulate delivery and recycling of proteins to the correct membrane domains. The tripartite complex composed of LIN7 (LIN7A, LIN7B or LIN7C), CASK and APBA1 may have the potential to couple synaptic vesicle exocytosis to cell adhesion in brain. Ensures the proper localization of GRIN2B (subunit 2B of the NMDA receptor) to neuronal postsynaptic density and may function in localizing synaptic vesicles at synapses where it is recruited by beta-catenin and cadherin. Required to localize Kir2 channels, GABA transporter (SLC6A12) and EGFR/ERBB1, ERBB2, ERBB3 and ERBB4 to the basolateral membrane of epithelial cells.

References

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Bulgin, N.L., et al. Neuromolecular Med. 10(4):343-355(2008)
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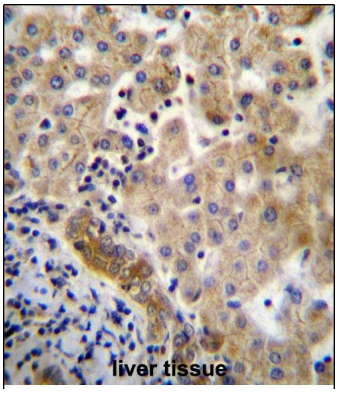
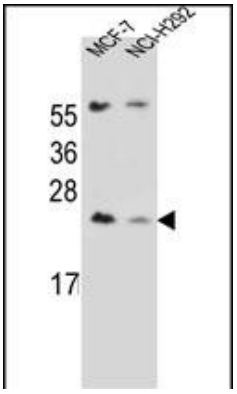
Images



LIN7C Antibdy (C-term) (Cat. #AP12807b)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 LIN7C Antibdy (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

LIN7C Antibody (C-term) (Cat. #AP12807b) western blot



analysis in MCF-7,NCI-H292 cell line lysates (35ug/lane).This demonstrates the LIN7C antibody detected the LIN7C protein (arrow).