

# Rabbit Anti-LIN7C antibody

## SL11872R

Product Name:	LIN7C		
Chinese Name:	LIN7C蛋白抗体		
Alias:	LIN 7 C; Lin 7 homolog C (C. elegans); LIN 7 protein 3; LIN 7C; LIN7 protein 3; MALS 3; MALS3; Mammalian lin seven protein 3; Veli 3 protein; VELI3; Vertebrate lin 7 homolog 3; LIN7C_HUMAN.		
Organism Species:	Rabbit		
Clonality:	Polyclonal		
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Zebrafish,Sheep,		
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.		
Molecular weight:	22kDa		
<b>Cellular localization:</b>	The cell membrane		
Form:	Lyophilized or Liquid		
<b>Concentration:</b>	1mg/ml		
immunogen:	KLH conjugated synthetic peptide derived from human LIN7C:86-197/197		
Lsotype:	IgG		
Purification:	affinity purified by Protein A		
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.		
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.		
PubMed:	PubMed		
Product Detail:	Velis are a family of small synaptic proteins that interact with other proteins at the post- synaptic density (PSD) of neuronal synapses. Velis contain the PDZ motif involved in recruiting cell adhesion molecules, receptors, and channels. Veli1 (also designated Lin- 7A and MALS-1), Veli2 (also designated Lin-7B and MALS-2), and Veli3 (also designated Lin-7C and MALS-3) are mammalian homologs of C. elegans LIN-7. Veli		

proteins are ubiquitously expressed with high expression in brain, liver, and testis. Velis are localized at the synaptic junctions in neurons. Velis bind to CASK, a neurexinbinding protein highly concentrated in synapses, and Mint1, a binding partner with a vesicle trafficking protein.

#### **Function:**

LIN7C plays a role in establishing and maintaining the asymmetric distribution of channels and receptors at the plasma membrane of polarized cells. It 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. LIN7C 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. It is also required to localize Kir2 channels, GABA transporter (SLC6A12) and EGFR/ERBB1, ERBB2, ERBB3 and ERBB4 to the basolateral membrane of epithelial cells.

#### Subunit:

Forms two exclusive ternary complexes with CASK and APBA1 or CASKIN1 (By similarity). Can also interact with other modular proteins containing protein-protein interaction domains like MPP5, MPP6, MPP7, DLG1, DLG2 and DLG3 through its L27 domain. Interacts with DLG4 and GRIN2B as well as CDH1 and CTNNB1, the channels KCNJ12/Kir2.2, KCNJ4/Kir2.3 and probably KCNJ2/Kir2.1 and SLC6A12/BGT-1 via its PDZ domain. The association of LIN7A with cadherin and beta-catenin is calcium-dependent, occurs at synaptic junctions and requires the actin cytoskeleton. Interacts with EGFR, ERBB2, ERBB3 and ERBB4 with both PDZ and KID domains. Associates with KIF17 via APBA1. Interacts with HTR4 (By similarity). Forms a tripartite complex composed of DLG1, MPP7 and LIN7 (LIN7A or LIN7C). Interacts with MAPK12

#### Subcellular Location:

Cell membrane. Peripheral membrane protein. Basolateral cell membrane. Cell junction. Enriched in synaptosomes and at epithelial cell-cell junctions. Mainly basolateral in renal epithelial cells.

Similarity: Belongs to the lin-7 family. Contains 1 L27 domain. Contains 1 PDZ (DHR) domain.

SWISS: 09NUP9

**Gene ID:** 55327

Database	links:
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Entrez Gene: 55327Human

Entrez Gene: 22343Mouse

Entrez Gene: 60442Rat

Omim: 612332Human

SwissProt: Q9NUP9Human

SwissProt: 088952Mouse

SwissProt: Q792I0Rat

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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