# abcam

# Product datasheet

# Recombinant Human LIN7A protein ab134591

# 1 Image

**Description** 

Product name Recombinant Human LIN7A protein

Purity > 90 % SDS-PAGE.

ab134591 is purified using conventional chromatography techniques.

**Expression system** Escherichia coli

Accession <u>O14910</u>

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

**Sequence** MGSSHHHHHHSSGLVPRGSHMGSMLKPSVTSAPTADMA

TLTVVQPLTLDR

DVARAIELLEKLQESGEVPVHKLQSLKKVLQSEFCTAIRE

VYQYMHETIT

VNGCPEFRARATAKATVAAFAASEGHSHPRVVELPKTDE

GLGFNVMGGKE

QNSPMSRIIPGGVAERHGGLKRGDQLLSVNGVSVEGEHH

**EKAVELLKA** 

AKDSVKLVVRYTPKVLEEMEARFEKLRTARRRQQQQLLIQ

QQQQQQQQT QQNHMS

Predicted molecular weight 28 kDa including tags

Amino acids 1 to 233

Tags His tag N-Terminus

### **Specifications**

Our **Abpromise guarantee** covers the use of **ab134591** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

Mass Spectrometry

Mass spectrometry MALDI-TOF

Form Liquid

1

#### **Preparation and Storage**

#### Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

 $Constituents: 0.02\% \ DTT, 0.32\% \ Tris \ HCI, 10\% \ Glycerol \ (glycerin, glycerine), 0.58\% \ Sodium$ 

chloride

#### **General Info**

#### **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 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.

#### **Tissue specificity**

Expressed in brain, testis, kidney, placenta and liver.

#### Sequence similarities

Belongs to the lin-7 family.

Contains 1 L27 domain.

Contains 1 PDZ (DHR) domain.

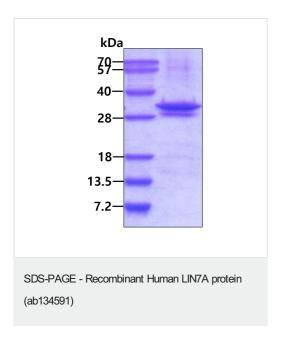
#### **Domain**

The kinase interacting site is required for proper delivery of ERBB2 to the basolateral membrane. The PDZ domain regulates endocytosis and recycling of the receptor at the membrane. The L27 domain mediates interaction with CASK and is involved in the formation of multimeric complexes and the association of LIN7 to membranes.

#### **Cellular localization**

Cell membrane. Basolateral cell membrane. Cell junction. Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Cell junction > tight junction. Cell junction > synapse > synaptosome. Enriched in synaptosomes and at epithelial cell-cell junctions (By similarity). Mainly basolateral in renal epithelial cells.

# **Images**



3ug by SDS-PAGE under reducing conditions and visualized by coomassie blue stain.

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