

## Product datasheet

# Recombinant human Lin28 protein ab107950

### Description

<b>Product name</b>	Recombinant human Lin28 protein	
<b>Biological activity</b>	Measured by its ability to induce fluorescence in Lin28 reporter cells (293 cells transfected with fluorescent protein genes under Lin28 control). Optimum activity was achieved at 20 µg/ml after incubation for 72 hr.	
<b>Purity</b>	> 90 % SDS-PAGE. Purity is greater than 90% by SDS-PAGE gel and HPLC analyses.	
<b>Endotoxin level</b>	< 0.100 Eu/µg	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<a href="#">Q9H9Z2</a>	
<b>Protein length</b>	Protein fragment	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	GPSVSNQQFAGGCAKAAEEAPEEAPEDAARAADPEQLL HGAGICKWFNVR MGFGFLSMTARAGVALDPPVDVVFVHQSCLHMEGFRSLK EGEAVEFTFKKS AKGLESIRVTGPGGVFCIGSERRPKGKSMQKRRSKGDRC YNCGGLDHHAK ECKLPPQPKKCHFCQSISHMVASCPLKAQQGP	
<b>Predicted molecular weight</b>	24 kDa including tags	
<b>Amino acids</b>	3 to 182	
<b>Additional sequence information</b>	Recombinant fragment including a 13-residue C-terminal TAT peptide.	

### Specifications

Our [Abpromise guarantee](#) covers the use of **ab107950** in the following tested applications.

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

<b>Applications</b>	SDS-PAGE Functional Studies
<b>Form</b>	Lyophilized

## Preparation and Storage

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### 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: 3.00

Constituent: 0.294% Sodium citrate

This product is an active protein and may elicit a biological response in vivo, handle with caution.

### Reconstitution

Reconstitute in water to a concentration of 1.0 mg/ml

## General Info

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### Function

Acts as a 'translational enhancer', driving specific mRNAs to polysomes and thus increasing the efficiency of protein synthesis. Its association with the translational machinery and target mRNAs results in an increased number of initiation events per molecule of mRNA and, indirectly, in stabilizing the mRNAs. Binds IGF2 mRNA, MYOD1 mRNA, ARBP/36B4 ribosomal protein mRNA and its own mRNA. Essential for skeletal muscle differentiation program through the translational up-regulation of IGF2 expression (By similarity). Acts as a suppressor of microRNA (miRNA) biogenesis by specifically binding the precursor let-7 (pre-let-7), a miRNA precursor. Acts by binding pre-let-7 and recruiting ZCCHC11/TUT4 uridylyltransferase, leading to the terminal uridylation of pre-let-7. Uridylated pre-let-7 miRNAs fail to be processed by Dicer and undergo degradation. Degradation of pre-let-7 in embryonic stem (ES) cells contributes to the maintenance of ES cells. In contrast, LIN28A down-regulation in neural stem cells by miR-125, allows the processing of pre-let-7. Specifically recognizes the 5'-GGAG-3' motif in the terminal loop of pre-let-7. Also recognizes and binds non pre-let-7 pre-miRNAs that contain the 5'-GGAG-3' motif in the terminal loop, leading to their terminal uridylation and subsequent degradation.

### Tissue specificity

Expressed in embryonic stem cells (ES cells), placenta and testis.

### Sequence similarities

Belongs to the lin-28 family.

Contains 2 CCHC-type zinc fingers.

Contains 1 CSD (cold-shock) domain.

### Developmental stage

Expressed in fetal liver. Expression decreases during differentiation of ES cells or upon induction of neuronal differentiation by retinoic acid.

### Domain

The CSD domain is required for function in muscle differentiation.

### Cellular localization

Cytoplasm. Nucleus > nucleolus. Nucleolar localization observed in 10-15% of the nuclei in differentiated myotubes (By similarity). Shuttles between the cytoplasm and the nucleus. Localizes to cytoplasmic processing bodies and stress granules.

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**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

- We investigate all quality concerns to ensure our products perform to the highest standards

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