

## Product datasheet

### Anti-Lin28A antibody ab46020

★★★★★ [15 Abreviews](#) [93 References](#) [2 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Lin28A antibody  |
| <b>Description</b>         | Rabbit polyclonal to Lin28A   |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, ICC/IF   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human   |
| <b>Immunogen</b>           | Recombinant full length protein corresponding to Human Lin28A.  |
| <b>General notes</b>       | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> |

#### Properties

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | 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. |
| <b>Purity</b>               | Whole antiserum  |
| <b>Clonality</b>            | Polyclonal   |
| <b>Isotype</b>              | IgG  |

#### Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab46020 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes  |
|-------------|-----------|--|
| WB          | ★★★★★ (6) | 1/1000. Detects a band of approximately 29 kDa (predicted molecular weight: 23 kDa). |
| ICC/IF      | ★★★★★ (3) | Use at an assay dependent concentration.   |

## Target

### 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.

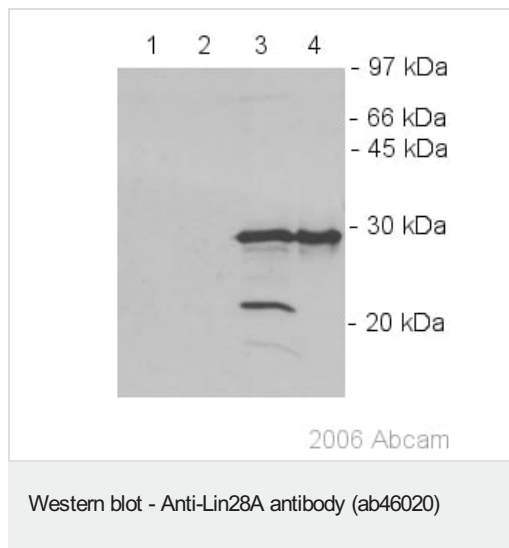
### Domain

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.

## Images



**All lanes :** Anti-Lin28A antibody (ab46020) at 1/1000 dilution

**Lane 1 :** PC-3 cell extract in lysis buffer containing NP-40 at 45 µg

**Lane 2 :** PC-3 cell extract (Trizol bottom phase) at 30 µg

**Lane 3 :** Tera-2 cell extract (Trizol bottom phase) at 30 µg

**Lane 4 :** Tera-2 cell extract in lysis buffer containing NP-40 at 45 µg

### Secondary

**All lanes :** Goat anti-rabbit HRP conjugated at 1/4000 dilution

**Predicted band size:** 23 kDa

**Observed band size:** 29 kDa

**Additional bands at:** 22 kDa. We are unsure as to the identity of these extra bands.

It is unclear why lin28A runs at a larger size than its predicted molecular weight but recombinant lin28 protein is also known to run at around 30 kDa.



Human Embryonic stem cells were fixed in PFA and then incubated with the primary antibody ab46020 (1:1000) diluted in 2% BSA for 16 hours at 4C. Cells were then washed and incubated with a Cy3 conjugated goat anti-rabbit polyclonal antibody (1:400). Cells were then washed and visualised.

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

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- 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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors