abcam

Product datasheet

Anti-Lin28A antibody [EPR4640] ab124765

Recombinant RabMAb

10 References 7 Images

Overview

Product name	Anti-Lin28A antibody [EPR4640]
Description	Rabbit monoclonal [EPR4640] to Lin28A
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IP, ICC/IF **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NCCIT and JAR whole cell lysates. IP: NCCIT whole cell lysates. Flow Cyt (intra): NCCIT cells. ICC/IF: JAR cells and NCCIT cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR4640
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124765 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
Flow Cyt (Intra)		1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Detects a band of approximately 26 kDa (predicted molecular weight: 23 kDa).
IP		1/10 - 1/100.
ICC/IF		1/100 - 1/500.

Application notes Is unsuitable for IHC-P.

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.

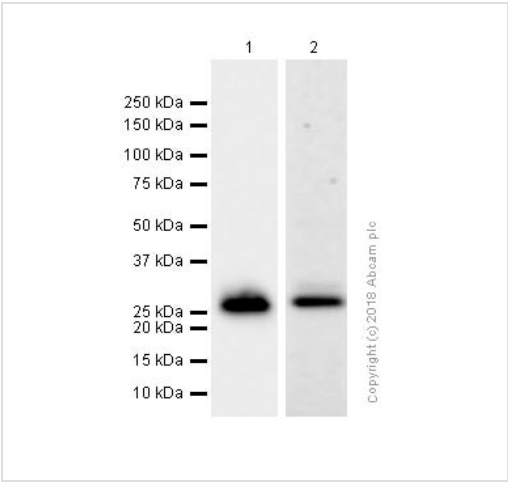
Developmental stage Expressed in fetal liver. Expression decreases during differentiation of ES cells or upon induction of neuronal differentiation by retinoic acid.

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



Western blot - Anti-Lin28A antibody [EPR4640] (ab124765)

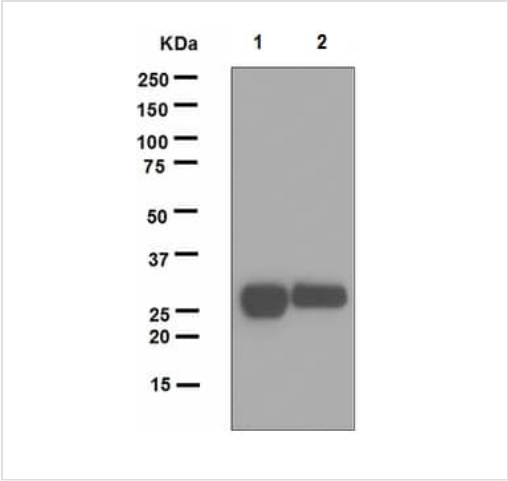
All lanes : Anti-Lin28A antibody [EPR4640] (ab124765) at 1/10000 dilution (Purified)

Lane 1 : NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysates
Lane 2 : JAR (Human placenta choriocarcinoma epithelial cell) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 23 kDa
Observed band size: 26 kDa



Western blot - Anti-Lin28A antibody [EPR4640] (ab124765)

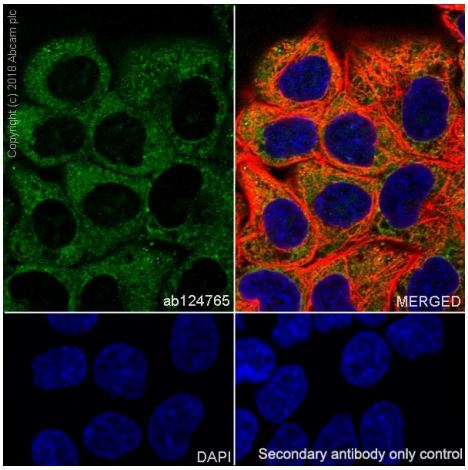
All lanes : Anti-Lin28A antibody [EPR4640] (ab124765) at 1/10000 dilution (unpurified)

Lane 1 : NCCIT cell lysate
Lane 2 : JAR cell lysate

Lysates/proteins at 10 µg per lane.

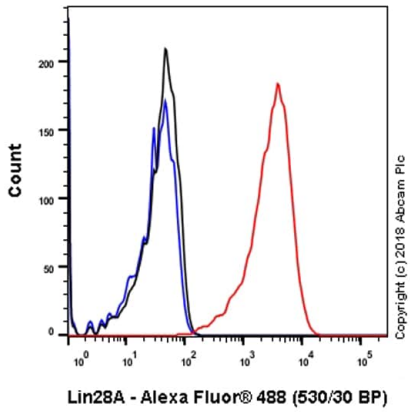
Secondary
All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 23 kDa



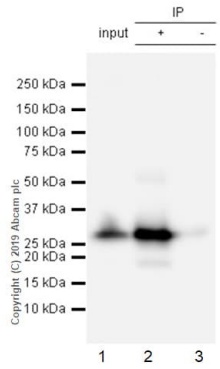
Immunocytochemistry/ Immunofluorescence - Anti-Lin28A antibody [EPR4640] (ab124765)

Immunocytochemistry/ Immunofluorescence analysis of JAR (Human placenta choriocarcinoma epithelial cell) cells labeling Lin28A with purified ab124765 at 1/500 dilution (1.2 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



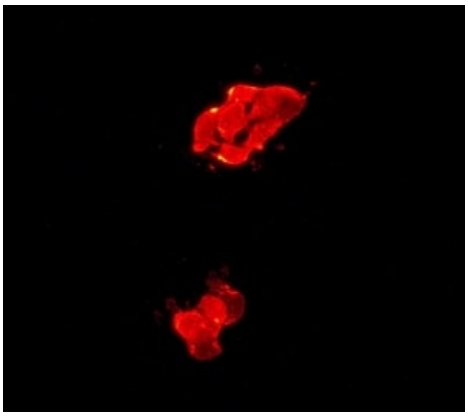
Flow Cytometry (Intracellular) - Anti-Lin28A antibody [EPR4640] (ab124765)

Intracellular Flow Cytometry analysis of NCCIT (Human pluripotent embryonic carcinoma epithelial cell) cells labeling Lin28A with purified ab124765 at 1/60 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-Lin28A antibody [EPR4640] (ab124765)

ab124765 (purified) at 1/30 dilution (2ug) immunoprecipitating Lin28A in NCCIT whole cell lysate. NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysate 10ug
Lane 2 (+): ab124765 & NCCIT whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab124765 in NCCIT whole cell lysate
For western blotting, VeriBlot for IP secondary antibody (HRP) (**ab131366**) was used at 1/1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Lin28A antibody [EPR4640] (ab124765)

ab124765 (unpurified), at 1/100 dilution, staining Lin28A in NCCIT cells by Immunofluorescence.

Anti-Lin28A antibody [EPR4640] (ab124765)

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