abcam

Product datasheet

Anti-Lin28A antibody [EPR4640] - BSA and Azide free ab226089



5 Images

Overview

Product name Anti-Lin28A antibody [EPR4640] - BSA and Azide free

Description Rabbit monoclonal [EPR4640] to Lin28A - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), IP, ICC/IF, WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab226089 is the carrier-free version of ab124765.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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

1

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR4640

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226089 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)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 26 kDa (predicted molecular weight: 23 kDa).

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.

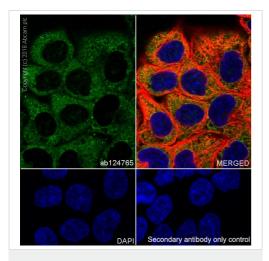
Domain The CSD domain is required for function in muscle differentiation.

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

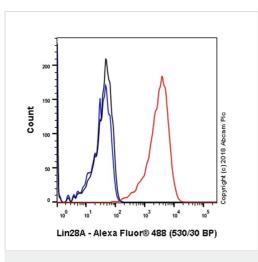
to cytoplasmic processing bodies and stress granules.

Images



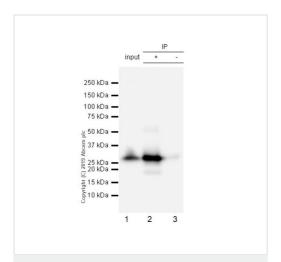
Immunocytochemistry/ Immunofluorescence - Anti-Lin28A antibody [EPR4640] - BSA and Azide free (ab226089) Immunocytochemistry/ Immunofluorescence analysis of JAR (Human placenta choriocarcinoma epithelial cell) cells labeling Lin28A with purified <u>ab124765</u> at 1/500 dilution (1.2 μ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with <u>ab195889</u> Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) at 1/200 (2.5 μ g/ml). Goat anti rabbit lgG (Alexa Fluor[®] 488, <u>ab150077</u>) was used as the secondary antibody at 1/1000 (2 μ g/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124765).



Flow Cytometry (Intracellular) - Anti-Lin28A antibody [EPR4640] - BSA and Azide free (ab226089)

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 Fluor[®] 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). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124765).



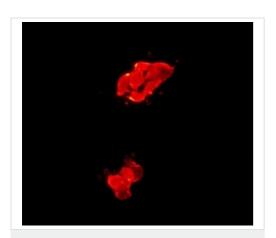
Immunoprecipitation - Anti-Lin28A antibody [EPR4640] - BSA and Azide free (ab226089)

<u>ab124765</u> (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 (+): <u>ab124765</u> & NCCIT whole cell lysate Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab124765</u> 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124765).



Immunocytochemistry/ Immunofluorescence - Anti-Lin28A antibody [EPR4640] - BSA and Azide free (ab226089)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab124765</u>).



Anti-Lin28A antibody [EPR4640] - BSA and Azide free (ab226089)

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