abcam

ab76369

Anti-Lin28A antibody [6D1F9]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human LIN28A aa 50 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link Q9H9Z2
Clone number	6D1F9
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

sELISA

Tested

Species	Recombinant full length protein
Dilution info	0.2 µg/mL
Notes	For sandwich ELISA, use this antibody as Capture at 0.2 µg/ml with Rabbit polyclonal to Lin28 (ab63740) as Detection.

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

Target data

See full target information LIN28A

Function

RNA-binding protein that inhibits processing of pre-let-7 miRNAs and regulates translation of mRNAs that control developmental timing, pluripotency and metabolism (PubMed:21247876). Seems to recognize a common structural G-quartet (G4) feature in its miRNA and mRNA targets (Probable). 'Translational enhancer' that drives specific mRNAs to polysomes and increases 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 mRNA stabilization. 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. Suppressor of microRNA (miRNA) biogenesis, including that of let-7, miR107, miR-143 and miR-200c. Specifically binds the miRNA precursors (pre-miRNAs), recognizing an 5'-GGAG-3' motif found in pre-miRNA terminal loop, and recruits TUT4 and TUT7 uridylyltransferases (PubMed:18951094, PubMed:19703396, PubMed:22118463, PubMed:22898984). This results in the terminal uridylation of target pre-miRNAs (PubMed:18951094, PubMed:19703396, PubMed:22118463, PubMed:22898984). Uridylated pre-miRNAs fail to be processed by Dicer and undergo degradation. The repression of let-7 expression is required for normal development and contributes to maintain the pluripotent state by preventing let-7-mediated differentiation of embryonic stem cells (PubMed:18951094, PubMed:19703396, PubMed:22118463, PubMed:22898984). Localized to the periendoplasmic reticulum area, binds to a large number of spliced mRNAs and inhibits the translation of mRNAs destined for the ER, reducing the synthesis of transmembrane proteins, ER or Golgi lumen proteins, and secretory proteins. Binds to and enhances the translation of mRNAs for several metabolic enzymes, such as PFKP, PDHA1 or SDHA, increasing glycolysis and oxidative phosphorylation. Which, with the let-7 repression may enhance tissue repair in adult tissue (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

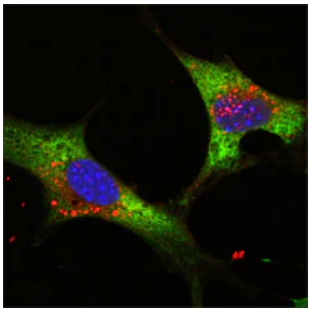
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

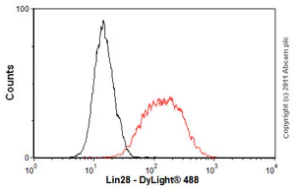
5 product images



Immunocytochemistry/ Immunofluorescence - Anti-Lin28A antibody [6D1F9] (ab76369)

Lin28A Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Lin28A antibody

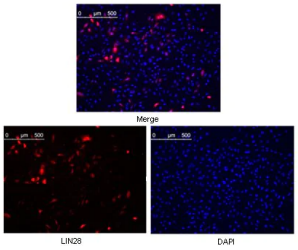
ab76369 at 1/2000 dillution staining Lin28A in NTERA-2 cells by Immunocytochemistry/ Immunofluorescence. The green color in image show positive staining with primary antibody while nuclei were stained blue with DRAQ5 fluorescent DNA dye.



Flow Cytometry - Anti-Lin28A antibody [6D1F9] (ab76369)

Lin28A Flow Cytometry staining using mouse Anti-Lin28A antibody

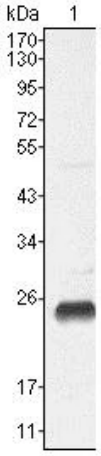
Overlay histogram showing HeLa cells stained with ab76369 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76369, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween for 20 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-Lin28A antibody [6D1F9] (ab76369)

Lin28A Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Lin28A antibody

Immunofluorescence staining of methanol fixed HeLa cells were transfected with pMX construct of human Lin28A. Cells were analyzed ~62 hours after transfection.

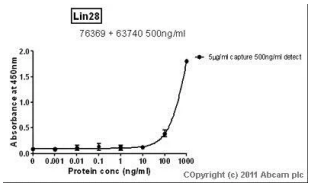


Western blot - Anti-Lin28A antibody [6D1F9] (ab76369)

All lanes:
Western blot - Anti-Lin28A antibody [6D1F9] (ab76369) at 1/2000 dilution

All lanes:
Cell lysates prepared from human NTERA-2 cells

Predicted band size: 23 kDa



Sandwich ELISA - Anti-Lin28A antibody [6D1F9] (ab76369)

Standard Curve for Lin28A (Analyte: (ab89225) Lin28 protein (His tag) (ab89225)); dilution range 1 pg/ml to 1 ug/ml using Capture Antibody (ab76369) Mouse monoclonal [6D1F9] to Lin28A

(ab76369) at 0.2 ug/ml and Detector Antibody (ab63740) Rabbit polyclonal to Lin28A (ab63740) at 0.1 ug/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.