Anti-Lin28 antibody ab46020

10 Abreviews | 19 References | 3 Images

Overview

Product name	Anti-Lin28 antibody
Description	Rabbit polyclonal to Lin28
Tested applications	WB, IHC-P, IP, ICC/IF
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Recombinant full length protein (Human) with hexahistidine tag

Properties

Form	Liquid
Storage instructions	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

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		
IHC-P		
IP		
ICC/IF		

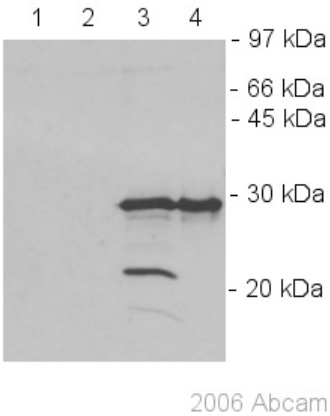
Application notes	ICC/IF: Use at an assay dependent dilution. IHC-P: 1/7000. (PMID 20101213) IP: Use at an assay dependent dilution. WB: 1/1000. Detects a band of approximately 29 kDa (predicted molecular weight: 23 kDa). Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

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.

Anti-Lin28 antibody images



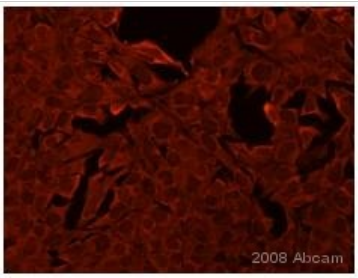
Western blot - Lin28 antibody (ab46020)

All lanes : Anti-Lin28 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

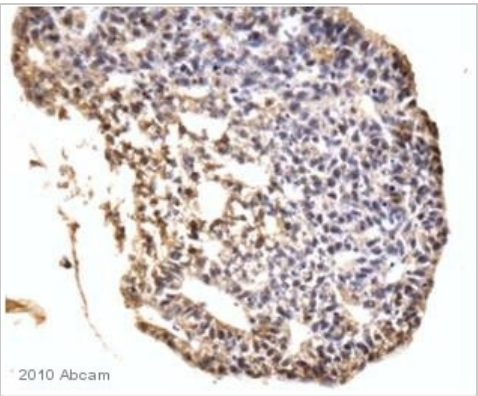
Secondary
Goat anti-rabbit HRP conjugated at 1/4000 dilution

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.



Immunocytochemistry/ Immunofluorescence - Lin28 antibody (ab46020)

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Lin28 antibody (ab46020)
This image is courtesy of an anonymous Abreview

ab46020 staining Lin28 in paraffin-embedded human tissue sections (ESC-derived embryoid bodies) by IHC-P. Tissue was fixed with paraformaldehyde and blocked with 8% Serum treatment in automated Bond Max system for 15 minutes. Samples were incubated with primary antibody (1/2000) for 15 minutes. An HRP-conjugated goat anti rabbit polyclonal (1/200) was used as secondary antibody.

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