

LIN28B Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1485C

Specification

LIN28B Antibody (Center) - Product Information

Application	IF, WB, IHC-P-Leica, FC,E
Primary Accession	O6ZN17
Other Accession	O45KJ6
Reactivity	Human, Mouse, Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	95-128

LIN28B Antibody (Center) - Additional Information

Gene ID 389421

Other Names

Protein lin-28 homolog B, Lin-28B, LIN28B, CSDD2

Target/Specificity

This LIN28B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-128 amino acids of human LIN28B.

Dilution

IF~~1:10~50
WB~~1:2000
IHC-P-Leica~~1:500
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LIN28B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

LIN28B Antibody (Center) - Protein Information

Name LIN28B

Synonyms CSDD2

Function Suppressor of microRNA (miRNA) biogenesis, including that of let-7 and possibly of miR107, miR-143 and miR-200c. Binds primary let-7 transcripts (pri-let-7), including pri-let-7g and pri-let-7a-1, and sequester them in the nucleolus, away from the microprocessor complex, hence preventing their processing into mature miRNA (PubMed:[22118463](#)). Does not act on pri-miR21 (PubMed:[22118463](#)). The repression of let-7 expression is required for normal development and contributes to maintain the pluripotent state of embryonic stem cells by preventing let-7-mediated differentiation. When overexpressed, recruits ZCCHC11/TUT4 uridylyltransferase to pre-let-7 transcripts, leading to their terminal uridylation and degradation (PubMed:[19703396](#)). This activity might not be relevant in vivo, as LIN28B-mediated inhibition of let-7 miRNA maturation appears to be ZCCHC11-independent (PubMed:[22118463](#)). Interaction with target pre-miRNAs occurs via an 5'- GGAG-3' motif in the pre-miRNA terminal loop. Mediates MYC-induced let-7 repression (By similarity). When overexpressed, isoform 1 stimulates growth of the breast adenocarcinoma cell line MCF-7. Isoform 2 has no effect on cell growth.

Cellular Location

Nucleus. Nucleus, nucleolus. Cytoplasm Note=Predominantly nucleolar (PubMed:[22118463](#)). In Huh7 cells, predominantly cytoplasmic, with only a subset of cells exhibiting strong nuclear staining; however, the specificity of the polyclonal antibody used in these experiments has not been not documented (PubMed:[16971064](#)).

Tissue Location

Expressed at high levels in the placenta and, at much lower, in testis and fetal liver (PubMed:[16971064](#)). Isoform 1 is only detected in placenta and in moderately and poorly differentiated hepatocellular carcinoma cells (at protein level). Isoform 2 is detected in fetal liver, non-tumor liver tissues, as well as well-differentiated tumor tissues (at protein level). Tends to be up-regulated in triple-negative (ER-,PR-,HER2-) breast tumors, as well as in liver, ovarian, and thyroid carcinomas (PubMed:[22118463](#))

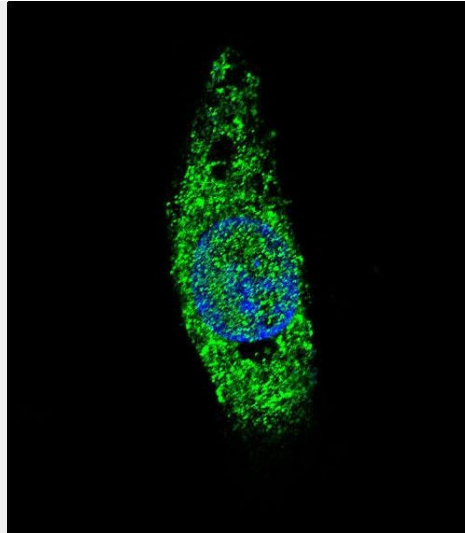
LIN28B Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

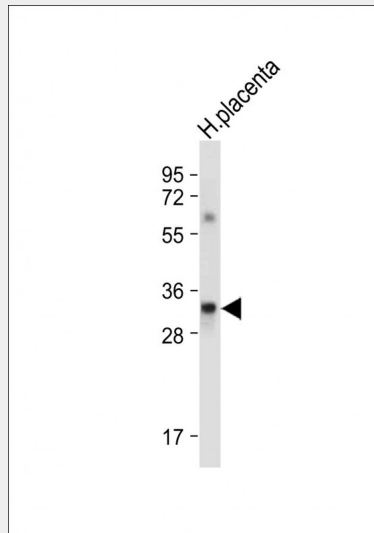
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LIN28B Antibody (Center) - Images

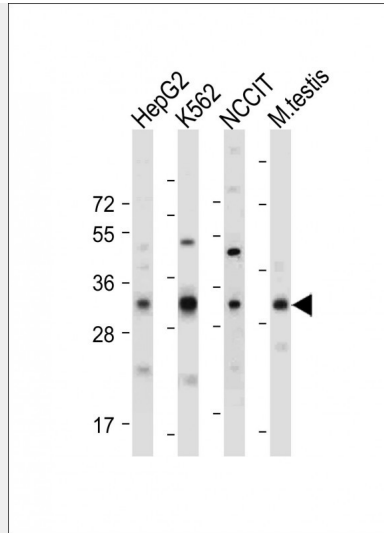




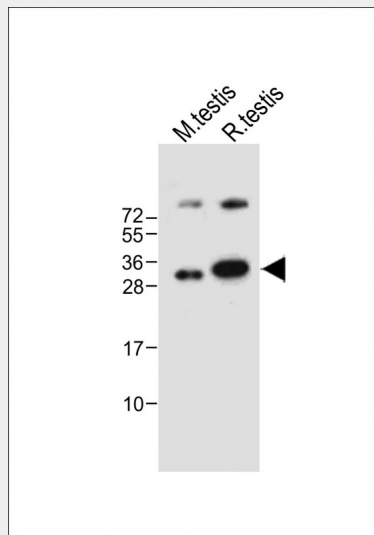
Confocal immunofluorescent analysis of LIN28B Antibody (Center) (Cat#AP1485c) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



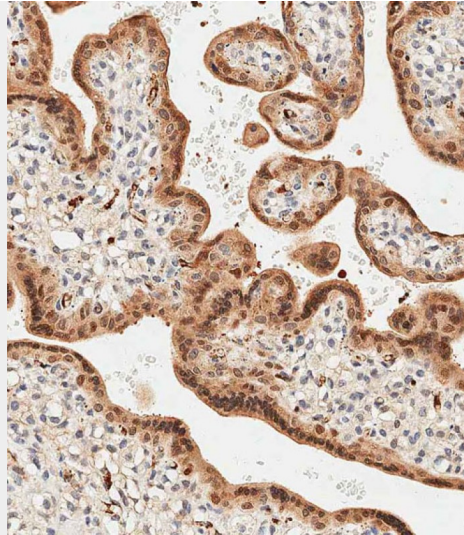
Anti-LIN28B Antibody (Center) at 1:2000 dilution + Human placenta tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



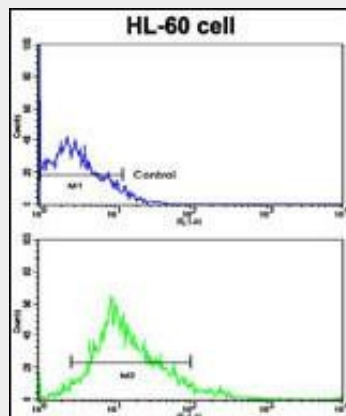
All lanes : Anti-LIN28B Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: NCCIT whole cell lysate Lane 4: Mouse testis tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-LIN28B Antibody (Center) at 1:2000 dilution Lane 1: Mouse testis tissue lysate Lane 2: Rat testis tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human placenta tissue using AP1485C performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Flow cytometric analysis of HL-60 cells using LIN28B Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

LIN28B Antibody (Center) - Background

Lin-28 homolog B (LIN28B) is overexpressed in hepatocellular carcinoma. The heterochronic gene lin-28 is a key regulator of developmental timing in the nematode *Caenorhabditis elegans*. Similar with lin-28 proteins, LIN28B conserves a cold shock domain and a pair of CCHC zinc finger domains. Phylogenetic analysis suggests that they might arise as a result of duplication from an ancestral gene. Overexpression of LIN28B was noted in most HCC cell lines and clinical samples. A short LIN28B isoform was also identified in non-tumor liver tissue and fetal liver. Although predominantly localized in the cytoplasm, LIN28B protein shows cell cycle-dependent nuclear translocation in Huh7 cells. Induced expression of exogenous LIN28B in a tet-off cell line promoted cancer cell proliferation.

LIN28B Antibody (Center) - References

Guo,Y., Gene 384, 51-61 (2006)

LIN28B Antibody (Center) - Citations

- [The Lin28b/Wnt5a axis drives pancreas cancer through crosstalk between cancer associated fibroblasts and tumor epithelium.](#)
- [An ontogenetic switch drives the positive and negative selection of B cells.](#)
- [IMP-1 displays cross-talk with K-Ras and modulates colon cancer cell survival through the novel proapoptotic protein CYFIP2.](#)