

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

### Specification

#### LIN28B Antibody (Center) - Product Information

|                   |                           |
|-------------------|---------------------------|
| Application       | IHC-P-Leica, IF, FC, WB,E |
| Primary Accession | <a href="#">Q6ZN17</a>    |
| Other Accession   | <a href="#">Q45KJ6</a>    |
| 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

IHC-P-Leica~~1:500  
IF~~1:10~50  
FC~~1:10~50  
WB~~1:2000  
E~~Use at an assay dependent concentration.

#### 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 uridyltransferase 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**

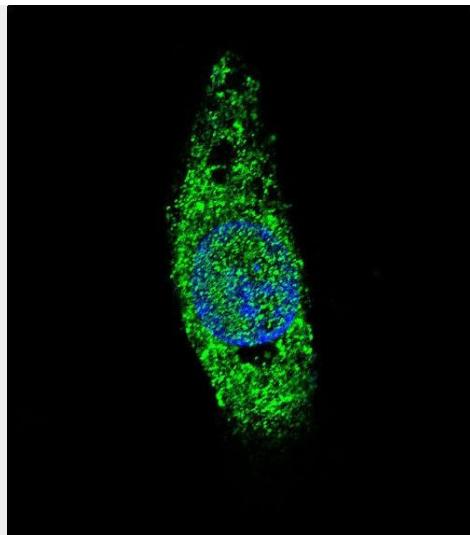
Expressed at high levels in the placenta and, at mucher lower, in testis and fetal liver (PubMed:16971064). Isoform 1 is only detected in placenta and in moderately and poorly differentiated hepatocellular carcinoma cells (at protein level). Isoform 2 is detected in fetal liver, non-tumor liver tissues, 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**

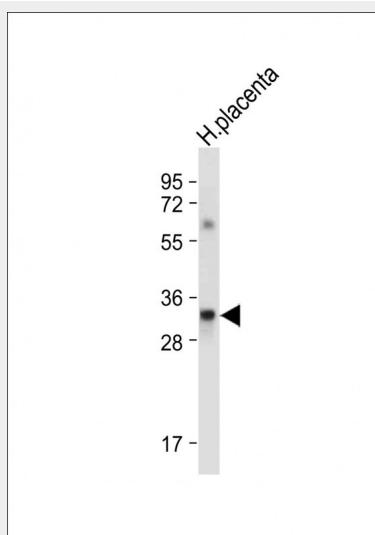
Provided below are standard protocols that you may find useful for product applications.

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

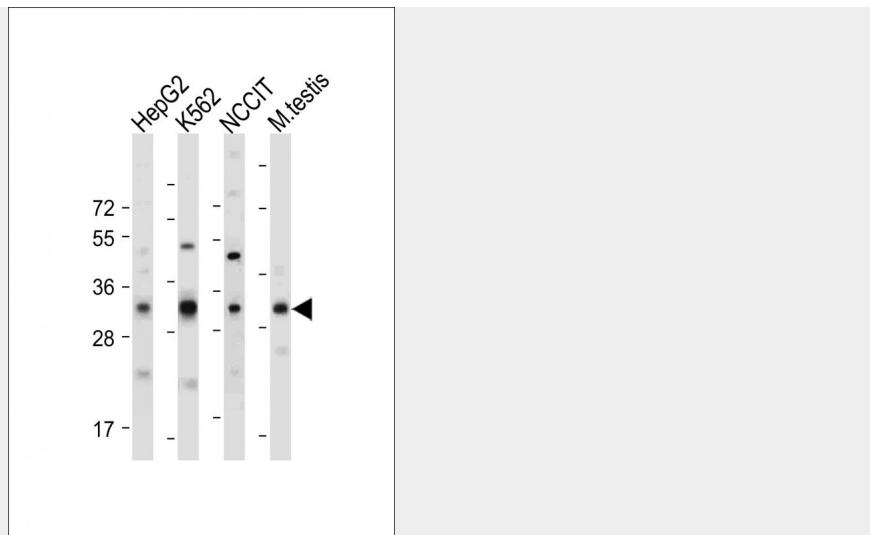
### **LIN28B Antibody (Center) - Images**



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).



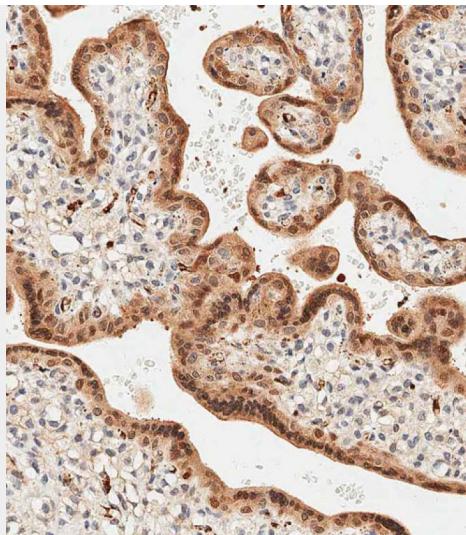
Anti-LIN28B Antibody (Center) at 1:2000 dilution + Human placenta tissue lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



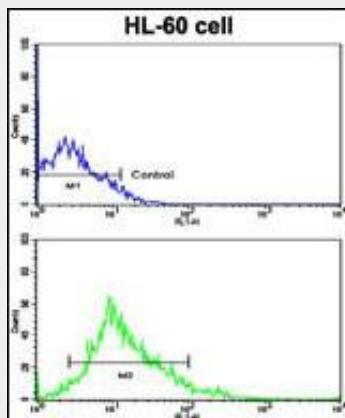
All lanes : Anti-LIN28B Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: NCCIT whole cell lysate Lane 4: Mouse testis tissue lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 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  $\mu$ g 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.](#)