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Lin28B Antibody

Rabbit mAb
Catalog # AP90538

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	Q6ZN17
Reactivity	Human
Clonality	Monoclonal
Other Names	CSDD2; FLJ16517; LIN28B; Protein lin-28 homolog B;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	27084

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:100~1:500 IP 1:50 FC 1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Lin28B
Description	It has recently been shown that upregulation of LIN28A and LIN28B in primary human tumors and human cancer cell lines is correlated with downregulation of let-7 miRNAs. LIN28 genes are reported to be involved in primordial germ cell development and germ cell malignancy. In addition, allelic variation in LIN28B is associated with regulating the timing of puberty in humans.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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.

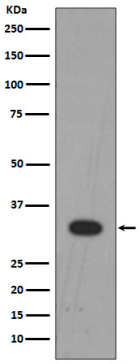
Cellular Location

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 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)

Images



Western blot analysis of Lin28B expression in K562 cell lysate.

Image not found : 202311/AP90538-IF.jpg

Immunofluorescent analysis of MCF-7 cells, using Lin28B Antibody .

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