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KD-Validated Anti-Lin-28 Homolog B Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI1999

Specification

KD-Validated Anti-Lin-28 Homolog B Mouse Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q6ZN17
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1 kappa**
Calculated MW	**Predicted, 27 kDa, observed, 32 kDa KDa**
Gene Name	**LIN28B**
Aliases	**LIN28B; Lin-28 Homolog B; CSDD2; Protein Lin-28 Homolog B; FLJ16517; Lin-28B; Lin-28 Homolog B (C. Elegans); Lin-28.2**
Immunogen	**Recombinant protein of human LIN28B**

KD-Validated Anti-Lin-28 Homolog B Mouse Monoclonal Antibody - Additional Information

Gene ID **389421**

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

KD-Validated Anti-Lin-28 Homolog B Mouse Monoclonal Antibody - 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).

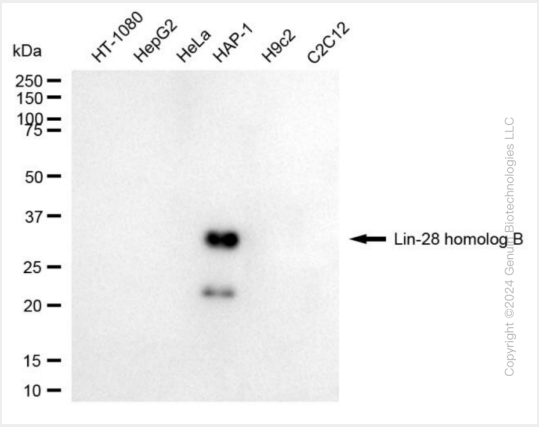
Tissue Location
Expressed at high levels in the placenta and, at mucher lower, in testis and fetal liver (PubMed:16971064). Isoform 1 is only detected in placenta and in moderately and poorly differentiated hepatocellular carcinoma cells (at protein level). Isoform 2 is detected in fetal liver, non-tumor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

KD-Validated Anti-Lin-28 Homolog B Mouse Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Lin-28 Homolog B Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-lin-28 homolog B antibody (Cat#AGI1999). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-lin-28 homolog B antibody (Cat#AGI1999, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.

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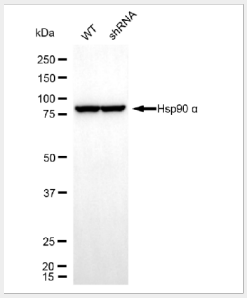
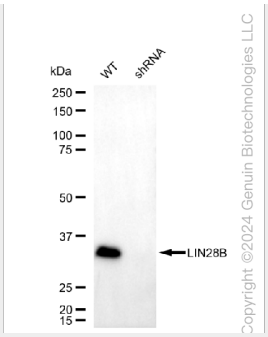
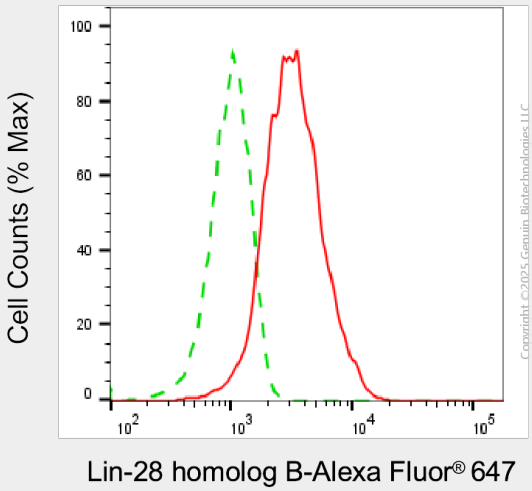
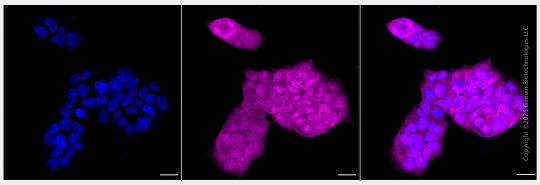




Western blotting analysis using anti-lin-28 homolog B antibody (Cat#AGI1999). Lin-28 homolog B expression in wild-type (WT) and lin-28 homolog B (LIN28B) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-lin-28 homolog B antibody (Cat#AGI1999, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Flow cytometric analysis of Lin-28 homolog B expression in HAP-1 cells using anti-Lin-28 homolog B antibody (Cat#AGI1999, 1:2,000). Green, isotype control; red, Lin-28 homolog B.



Immunocytochemical staining of HAP1 cells with anti-Lin-28 homolog B antibody (Cat#AGI1999, 1:1,000). Nuclei were stained blue with DAPI;Lin-28 homolog B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.