

LIN-28 (h2): 293T Lysate: sc-175922

BACKGROUND

LIN-28 is a highly conserved, RNA-binding, cytoplasmic protein. It consists of a cold shock domain and retroviral-type (CCHC) zinc finger motifs that were first identified in *Caenorhabditis elegans*. LIN-28 controls the timing of events during embryonic development and is readily expressed in embryos, embryonic stem cells and embryonal carcinoma cells. The presence of LIN-28 persists in some adult tissues including cardiac and skeletal muscle. In differentiating myoblasts, LIN-28 increases protein synthesis efficiency and binds to the growth and differentiation factor IGF-II.

REFERENCES

1. Moss, E.G., et al. 1997. The cold shock domain protein LIN-28 controls developmental timing in *C. elegans* and is regulated by the LIN-4 RNA. *Cell* 88: 637-646.
2. Seggerson, K., et al. 2002. Two genetic circuits repress the *Caenorhabditis elegans* heterochronic gene LIN-28 after translation initiation. *Dev. Biol.* 243: 215-225.
3. Moss, E.G. and Tang, L. 2003. Conservation of the heterochronic regulator LIN-28, its developmental expression and microRNA complementary sites. *Dev. Biol.* 258: 432-442.
4. Yang, D.H. and Moss, E.G. 2003. Temporally regulated expression of LIN-28 in diverse tissues of the developing mouse. *Gene Expr. Patterns* 3: 719-726.
5. Sempere, L.F., et al. 2004. Expression profiling of mammalian microRNAs uncovers a subset of brain-expressed microRNAs with possible roles in murine and human neuronal differentiation. *Genome Biol.* 5: R13.
6. Wu, L. and Belasco, J.G. 2005. MicroRNA regulation of the mammalian LIN-28 gene during neuronal differentiation of embryonal carcinoma cells. *Mol. Cell. Biol.* 25: 9198-9208.
7. Guo, Y., et al. 2006. Identification and characterization of LIN-28 homolog B (LIN-28B) in human hepatocellular carcinoma. *Gene* 384: 51-61.

CHROMOSOMAL LOCATION

Genetic locus: LIN28A (human) mapping to 1p36.11.

PRODUCT

LIN-28 (h2): 293T Lysate represents a lysate of human LIN-28 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

LIN-28 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive LIN-28 antibodies. Recommended use: 10-20 µl per lane.

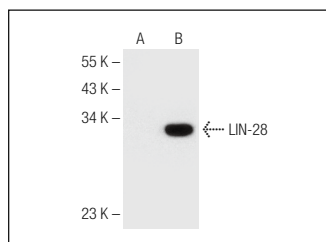
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

LIN-28 (C-9): sc-374460 is recommended as a positive control antibody for Western Blot analysis of enhanced human LIN-28 expression in LIN-28 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



LIN-28 (C-9): sc-374460. Western blot analysis of LIN-28 expression in non-transfected: sc-117752 (A) and human LIN-28 transfected: sc-175922 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.