

LIN-41 (Q-17): sc-54036

BACKGROUND

LIN-41, also called tripartite motif-containing 71 (TRIM71), which was first identified in *Caenorhabditis elegans*, is responsible for the timing of cell fate determination. By encoding microRNAs (miRNAs), the heterochronic genes LET-7 and LIN-4 downregulate the gene encoding LIN-41. The miRNAs bind to six complementary sites on the 3' untranslated region (UTR) of the LIN-41 gene. This downregulation positively regulates the timing of the expression of LIN-29, an adult specification transcription factor. Null mutations in the gene encoding LIN-41 lead to the premature development of adult tissues during larval stages. Although LIN-41 is expressed in many different embryonic cell types, it is most highly expressed in the developing limb buds, tail buds and brachial arches.

REFERENCES

- Slack, F.J., et al. 2000. The LIN-41 RBCC gene acts in the *C. elegans* heterochronic pathway between the LET-7 regulatory RNA and the LIN-29 transcription factor. *Mol. Cell* 5: 659-669.
- Vella, M.C., et al. 2004. The *C. elegans* microRNA LET-7 binds to imperfect LET-7 complementary sites from the LIN-41 3'UTR. *Genes Dev.* 18: 132-137.
- Lancman, J.J., et al. 2005. Analysis of the regulation of LIN-41 during chick and mouse limb development. *Dev. Dyn.* 234: 948-960.
- Schulman, B.R., et al. 2005. Reciprocal expression of LIN-41 and the microRNAs LET-7 and MIR-125 during mouse embryogenesis. *Dev. Dyn.* 234: 1046-1054.
- Bagga, S., et al. 2005. Regulation by LET-7 and LIN-4 miRNAs results in target mRNA degradation. *Cell* 122: 553-563.

CHROMOSOMAL LOCATION

Genetic locus: TRIM71 (human) mapping to 3p22.3; Trim71 (mouse) mapping to 9 F3.

SOURCE

LIN-41 (Q-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LIN-41 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54036 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

LIN-41 (Q-17) is recommended for detection of LIN-41 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LIN-41 (Q-17) is also recommended for detection of LIN-41 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for LIN-41 siRNA (h): sc-72328, LIN-41 siRNA (m): sc-72329, LIN-41 shRNA Plasmid (h): sc-72328-SH, LIN-41 shRNA Plasmid (m): sc-72329-SH, LIN-41 shRNA (h) Lentiviral Particles: sc-72328-V and LIN-41 shRNA (m) Lentiviral Particles: sc-72329-V.

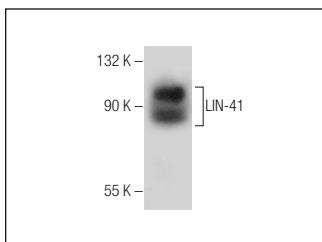
Molecular Weight of LIN-41: 93 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LIN-41 (Q-17): sc-54036. Western blot analysis of LIN-41 expression in mouse brain tissue extract.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **LIN-41 (E-1): sc-393352** or **LIN-41 (B-12): sc-393338**, our highly recommended monoclonal alternatives to LIN-41 (Q-17).