

LIN-41 (P-18): sc-54035

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.

CHROMOSOMAL LOCATION

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

SOURCE

LIN-41 (P-18) 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-54035 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LIN-41 (P-18) 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 (P-18) is also recommended for detection of LIN-41 in additional species, including canine and bovine.

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.

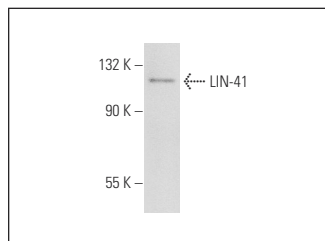
Molecular Weight of LIN-41: 93 kDa.

Positive Controls: F9 cell lysate: sc-2245.

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 (P-18): sc-54035. Western blot analysis of LIN-41 expression in F9 whole cell lysate.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.



Try **LIN-41 (E-1): sc-393352** or **LIN-41 (B-12): sc-393338**, our highly recommended monoclonal alternatives to LIN-41 (P-18).