SANTA CRUZ BIOTECHNOLOGY, INC.

LIN-41 (B-12): sc-393338



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

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- 2. Vella, M.C., Choi, E.Y., Lin, S.Y., Reinert, K. and Slack, F.J. 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.
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CHROMOSOMAL LOCATION

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

SOURCE

LIN-41 (B-12) is a mouse monoclonal antibody raised against amino acids 264-532 mapping within an internal region of LIN-41 of human origin.

PRODUCT

Each vial contains 200 μ g lgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LIN-41 (B-12) is recommended for detection of LIN-41 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

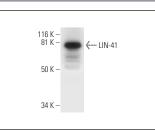
Molecular Weight of LIN-41: 93 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGK BP-HRP: sc-516102 or m-IgGK 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



LIN-41 (B-12): sc-393338. Western blot analysis of LIN-41 expression in NTERA-2 cl.D1 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 for detailed protocols and support products.