

LIN37 (Q-16): sc-161795



The Power to Question

BACKGROUND

A variety of growth factor signaling molecules have been shown to regulate *C. elegans* development, including members of the EGF, FGF and TGF β super-families. These factors bind to specific receptors and transduce extracellular signals to the nucleus. Receptor tyrosine kinase/Ras pathways also play a critical role in cell signaling and are responsible for proper vulval development. The LIN proteins regulate an intercellular signaling process that induces formation of the hermaphrodite vulva in *C. elegans* by acting to prevent the activation of a receptor tyrosine kinase/Ras signaling pathway. LIN37 is a 246 amino acid protein that is a mammalian homolog of the *C. elegans* Lin-37 protein. LIN37 functions as a component of the DREAM complex (also known as the LINC complex), which is comprised of several proteins, all of which work in concert to repress cell cycle-dependent genes.

REFERENCES

1. Horvitz, H.R., et al. 1983. Mutations that affect neural cell lineages and cell fates during the development of the nematode *Caenorhabditis elegans*. Cold Spring Harb. Symp. Quant. Biol. 48: 453-463.
2. Carpenter, G. 1993. EGF: new tricks for an old growth factor. Curr. Opin. Cell Biol. 5: 261-264.
3. Kayne, P.S. and Sternberg, P.W. 1995. Ras pathways in *Caenorhabditis elegans*. Curr. Opin. Genet. Dev. 5: 38-43.
4. Sternberg, P.W., et al. 1995. LET-23-mediated signal transduction during *Caenorhabditis elegans* development. Mol. Reprod. Dev. 42: 523-528.
5. Korenjak, M., et al. 2004. Native E2F/RBF complexes contain Myb-interacting proteins and repress transcription of developmentally controlled E2F target genes. Cell 119: 181-193.
6. Schmit, F., et al. 2007. LINC, a human complex that is related to pRB-containing complexes in invertebrates regulates the expression of G₂/M genes. Cell Cycle 6: 1903-1913.

CHROMOSOMAL LOCATION

Genetic locus: LIN37 (human) mapping to 19q13.12; Lin37 (mouse) mapping to 7 B1.

SOURCE

LIN37 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LIN37 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161795 P, (100 μ g 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.

APPLICATIONS

LIN37 (Q-16) is recommended for detection of LIN37 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 LIN37 siRNA (h): sc-97565, LIN37 siRNA (m): sc-146733, LIN37 shRNA Plasmid (h): sc-97565-SH, LIN37 shRNA Plasmid (m): sc-146733-SH, LIN37 shRNA (h) Lentiviral Particles: sc-97565-V and LIN37 shRNA (m) Lentiviral Particles: sc-146733-V.

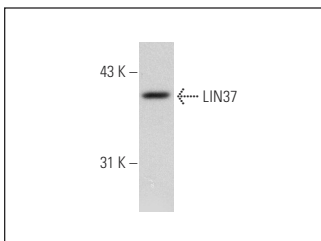
Molecular Weight of LIN37: 28 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

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



LIN37 (Q-16): sc-161795. Western blot analysis of LIN37 expression in MCF7 whole cell lysate.

RESEARCH USE

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

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Try **LIN37 (G-3): sc-515686**, our highly recommended monoclonal alternative to LIN37 (Q-16).