SANTA CRUZ BIOTECHNOLOGY, INC.

MXL-1 (cC-17): sc-9206

BACKGROUND

Cell proliferation and development are carefully controlled in *C. elegans*, with each cell following a nearly invariant pattern of differentiation. Vulval development in particular provides a useful model for studying how cell fate is determined. In addition to cell signaling pathways such as Notch and Ras pathways, the establishment of cell polarity and the asymmetric distribution of certain receptors are also critical for proper cell fate determination. Many genes exist in vertebrates controlling proliferation in a wide range of cell lineages, and a large number of these genes, known as oncogenes, contribute to the growth of cancer cells, including MYC, MAX, MAD, MNT and ROX. MDL-1 and MXL-1 are the *C. elegans* homologues of the vertebrate Mad and Max proteins, respectively.

REFERENCES

1. Evan, G. and Littlewood, T.D. 1993. The role of C-Myc in cell growth. Curr. Opin. Genet. Dev. 3: 44-49.
2. Sundaram, M. and Han, M. 1996. Control and integration of cell signaling pathways during *C. elegans* vulval development. Bioessays 18: 473-480.
3. Sommer, R.J. and Sternberg, P.W. 1996. Evolution of nematode vulval fate patterning. Dev. Biol. 173: 396-407.
4. Henriksson, M. and Luscher, B. 1996. Proteins of the Myc network: essential regulators of cell growth and differentiation. Adv. Cancer Res. 68: 109-182.
5. Kornfeld, K. 1997. Vulval development in *Caenorhabditis elegans*. Trends Genet. 13: 55-61.
6. Yuan, J., Tirabassi, R.S., Bush, A.B. and Cole, M.D. 1998. The *C. elegans* MDL-1 and MXL-1 proteins can functionally substitute for vertebrate Mad and Max. Oncogene 17: 1109-1118.

SOURCE

MXL-1 (cC-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MXL-1 of *C. elegans* 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-9206 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.

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.

APPLICATIONS

MXL-1 (cC-17) is recommended for detection of MXL-1 of *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

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) 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.