SANTA CRUZ BIOTECHNOLOGY, INC.

# MAB-5 (cF-20): sc-15523

## BACKGROUND

During postembryonic development in *C. elegans*, posterior-specific pattern formation requires the gene mab-5. mab-5 contains a homeobox region, suggesting that mab-5 affects cell differentiation and cell migration by regulating gene expression. For example, mab-5 controls the expression of EGL-5 and, in combination with LIN-22, controls the expression of LIN-32. Additionally, the caudal homolog Pad-1 turns on mab-5 in V6 during embryogenesis, whereas the Wnt signaling pathway activates mab-5 during postembryonic development. The mab-5 gene product, MAB-5 (also designated male abnormal 5 protein), controls epidermal, neuronal and mesodermal cell differentiation and migration within the posterior body region. In conclusion, MAB-5 is required for the formation of posterior seam cells, which are epidermal precursor cells.

## REFERENCES


1. Costa, M., Weir, M., Coulson, A., Sulston, J. and Kenyon, C. 1988. Posterior pattern formation in *C. elegans* involves position-specific expression of a gene containing a homeobox. Cell 55: 747-756.
2. Yi, W., Ross, J.M. and Zarkower, D. 2000. Mab-3 is a direct TRA-1 target gene regulating diverse aspects of *C. elegans* male sexual development and behavior. Development 127: 4469-4480.
3. Ching, Q. and Kenyon, C. 1999. EGL-27 generates anteroposterior patterns of cell fusion in *C. elegans* by regulating Hox gene expression and Hox protein function. Development 126: 3303-3312.
4. Wrischnik, L.A. and Kenyon, C.J. 1997. The role of LIN-22, a Hairy/Enchancer of split homolog, in patterning the peripheral nervous system of *C. elegans*. Development 124: 2875-2888.
5. Hunter, C.P., Harris, J.M., Maloof, J.N., Kenyon, C. 1999. Hox gene expression in a single *Caenorhabditis elegans* cell is regulated by a caudal homolog and intercellular signals that inhibit Wnt signaling. Development 126: 805-814.


## SOURCE

MAB-5 (cF-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MAB-5 of *Caenorhabditis 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-15523 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.

## APPLICATIONS

MAB-5 (cF-20) is recommended for detection of MAB-5 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.

## PROTOCOLS

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