# LET-23 (cC-17): sc-9224



The Power to Question

#### **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. Cell signaling pathways such as Notch and Ras pathways are critical for proper cell fate determination. LET-60, a member of the *C. elegans* Ras superfamily, coordinates with BAR-1, the beta-catenin homologue, and acts as a switch between vulval and hypodermal cell fates during the inductive signaling pathway that initiates vulva formation. LET-23 is a tyrosine kinase receptor required for the induction of the *C. elegans* vulva, survival past the L1 stage, hermaphrodite fertility and for male spicule development. LET-23 is the homolog of the EGFR in *C. elegans*, and is preferentially localized to the basolateral membranes of the six vulval precursor cells. EGL-15 encodes a receptor tyrosine kinase of the fibroblast growth factor receptor (FGFR) subfamily and is required for the normal cell migrations of the sex myoblasts in *C. elegans*.

## **REFERENCES**

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#### **SOURCE**

LET-23 (cC-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LET-23 of *Caenorhabditis elegans* origin.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9224 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

LET-23 (cC-17) is recommended for detection of LET-23 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).

Molecular Weight of LET-23: 155 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat lgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat lgG-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 lgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat lgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **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.

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