# CED-9 (cC-14): sc-9202



The Power to Question

#### **BACKGROUND**

Several proteins involved in regulating and executing programmed cell death have been identified in *C. elegans*. CED-2, which is similar to the human adaptor protein CrkII, as well as CED-5 and CED-7, which are orthologs of the mammalian DOCK180 and ABC transporter proteins, respectively, are involved in the engulfment of dying cells. CED-3, a member of the ICE protease/caspase family, and CED-4, a homolog of the mammalian Apaf-1, both promote apoptosis, whereas CED-9, a homolog of the mammalian BcI-2 protein, inhibits cell death. EGL-1 and CED-6 both function as death-promoting proteins, with CED-6 playing a role in the engulfment of apoptotic cells. Ces-2 kills neurons by negatively regulating the protective activity of Ces-1, thereby controlling the programmed deaths of specific neurons.

### **REFERENCES**

- Yuan, J., et al. 1992. The *Caenorhabditis elegans* cell death gene CED-4 encodes a novel protein and is expressed during the period of extensive programmed cell death. Development 116: 309-320.
- Yuan, J., et al. 1993. The *C. elegans* cell death gene CED-3 encodes a protein similar to mammalian Interleukin-1 beta-converting enzyme. Cell 75: 641-652.
- Hengartner, M.O., et al. 1994. C. elegans cell survival gene CED-9 encodes a functional homolog of the mammalian proto-oncogene Bcl-2. Cell 76: 665-676.
- 4. Wu, Y.C., et al. 1998. *C. elegans* phagocytosis and cell-migration protein CED-5 is similar to human DOCK180. Nature 392: 501-504.
- Conradt, B., et al. 1998. The *C. elegans* protein EGL-1 is required for programmed cell death and interacts with the Bcl-2-like protein CED-9. Cell 93: 519-529.
- 6. Wu, Y.C., et al. 1998. The *C. elegans* cell corpse engulfment gene CED-7 encodes a protein similar to ABC transporters. Cell 93: 951-960.
- 7. Liu, Q.A., et al. 1998. Candidate adaptor protein CED-6 promotes the engulfment of apoptotic cells in *C. elegans*. Cell 93: 961-972.
- 8. Metzstein, M.M., et al. 1999. The *C. elegans* cell death specification gene ces-1 encodes a snail family zinc finger protein. Mol. Cell 4: 309-319.
- 9. Reddien, P.W., et al. 2000. CED-2/CrkII and CED-10/Rac control phagocytosis and cell migration in *Caenorhabditis elegans*. Nat. Cell Biol. 2: 131-136.

# **SOURCE**

CED-9 (cC-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CED-9 of *Caenorhabditis elegans* origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with 0.1% sodium azide and 0.2% gelatin.

Blocking peptide available for competition studies, sc-9202 P, (100  $\mu g$  peptide in 0.5 ml PBS containing 0.1% sodium azide and 0.2% BSA)

#### **APPLICATIONS**

CED-9 (cC-14) is recommended for detection of CED-9 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) with UltraCruz™ Mounting Medium: sc-24941.

## **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.

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