

ces-2 (cN-14): sc-12180

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 Crkl, 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 Bcl-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

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2. Yuan, J., et al. 1993. The *C. elegans* cell death gene CED-3 encodes a protein similar to mammalian interleukin-1 β -converting enzyme. *Cell* 75: 641-652.
3. 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.
5. 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/Crkl and CED-10/Rac control phagocytosis and cell migration in *Caenorhabditis elegans*. *Nat. Cell Biol.* 2: 131-136.

SOURCE

ces-2 (cN-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ces-2 of *Caenorhabditis elegans* 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-12180 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

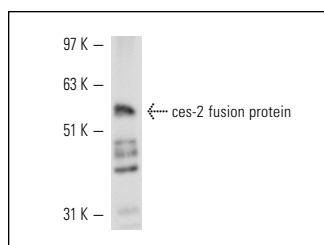
APPLICATIONS

ces-2 (cN-14) is recommended for detection of ces-2 of *Caenorhabditis elegans* 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).

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



ces-2 (cN-14): sc-12180. Western blot analysis of *C. elegans* recombinant ces-2 fusion protein.

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.