SANTA CRUZ BIOTECHNOLOGY, INC.

CED-8 (cN-17): sc-14078

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BIOTECHNOLOGY

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-8 is a transmembrane protein that localizes to the plasma membrane and is similar to XK, a putative membrane transport protein in human. CED-8 is important for the proper kinetics in the execution of programmed cell death during development in *C. elegans*. The gene CED-8 functions downstream of, or in parallel to, the regulatory cell death gene CED-9, and functions as a cell death effector downstream of the CED-3 gene product caspase. All CED-1, CED-2, NUC-1, CED-5, CED-6, CED-7, CED-8 and CED-10 play important roles in the engulfment of cell corpses during and after programmed cell death.

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 beta-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/CrkII and CED-10/Rac control phagocytosis and cell migration in *Caenorhabditis elegans*. Nat. Cell Biol. 2: 131-136.

SOURCE

CED-8 (cN-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CED-8 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14078 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CED-8 (cN-17) is recommended for detection of CED-8 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.

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.