

cep-1 (cN-18): sc-135461

The Power to Question

BACKGROUND

p53, a DNA-binding, oligomerization domain- and transcription activation domain-containing tumor suppressor, upregulates growth arrest and apoptosis-related genes in response to stress signals, thereby influencing programmed cell death, cell differentiation and cell cycle control mechanisms. cep-1 (p53-like protein), is the 644 amino acid *C. elegans* homolog of mammalian tumor suppressor p53. While the DNA-binding domains of p53 and cep-1 share little homology, both recognize nearly identical DNA sequences. Ubiquitously expressed in embryos, cep-1 is required to activate apoptosis of germ cells in response to genotoxic stress, and additionally activates *C. elegans* pgh-1, the homolog of Gas1 (growth arrest-specific 1). Together, cep-1 and pgh-1 mediate embryonic viability of mutations of TEL02, which is an essential gene in the regulation of checkpoint responses. Overexpression of cep-1 has been found to cause widespread caspase-independent cell death.

REFERENCES

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SOURCE

cep-1 (cN-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of cep-1 of *C. elegans* origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135461 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cep-1 (cN-18) is recommended for detection of cep-1 of *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of cep-1: 75 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.