SANTA CRUZ BIOTECHNOLOGY, INC.

caspase-14 p10 (R-18): sc-9642

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

A unique family of cysteine proteases has been described that differs in sequence, structure and substrate specificity from any previously described protease family. This family, termed Ced-3/caspase-1, is composed of caspase-1, caspase-2, caspase-3, caspase-4, caspase-6 and caspase-7 (also designated Mch3, ICE-LAP3 or CMH-1), caspase-9, caspase-10, and caspase-14. Ced-3/caspase-1 family members function as key components of the apoptotic machinery and act to destroy specific target proteins which are critical to cellular longevity. caspase-3, caspase-7 and caspase-9, but not caspase-1, have been shown to cleave the nuclear protein PARP into an apoptotic fragment. caspase-14, also designated MICE (for mini-ICE), is highly expressed in embryonic tissues but appears to be absent from adult tissues. Procaspase-14 can be processed *in vitro* by caspase-8 and caspase-10 but not by other caspases.

CHROMOSOMAL LOCATION

Genetic locus: CASP14 (human) mapping to 19p13.12; Casp14 (mouse) mapping to 10 C1.

SOURCE

caspase-14 p10 (R-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of caspase-14 p10 of mouse origin.

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-9642 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

caspase-14 p10 (R-18) is recommended for detection of p10 subunit and precursor of caspase-14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

caspase-14 p10 (R-18) is also recommended for detection of the p10 subunit and precursor of caspase-14 in additional species, including equine and canine.

Suitable for use as control antibody for caspase-14 siRNA (h): sc-37364, caspase-14 siRNA (m): sc-37365, caspase-14 shRNA Plasmid (h): sc-37364-SH, caspase-14 shRNA Plasmid (m): sc-37365-SH, caspase-14 shRNA (h) Lentiviral Particles: sc-37364-V and caspase-14 shRNA (m) Lentiviral Particles: sc-37365-V.

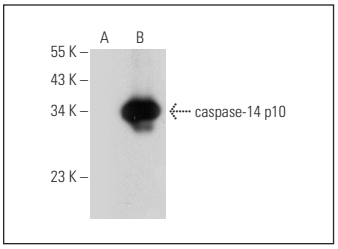
Molecular Weight of caspase-14 p10: 30/18/11 kDa.

Positive Controls: human CASP14 transfected HEK293T whole cell lysate.

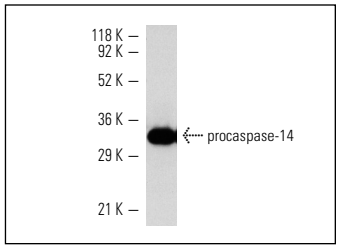
RECOMMENDED SECONDARY REAGENTS

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



caspase-14 p10 (R-18): sc-9642. Western blot analysis of caspase-14 p10 expression in non-transfected (**A**) and human CASP14 transfected (**B**) HEK293T whole cell lysates.



caspase-14 p10 (R-18): sc-9642. Western blot analysis of human recombinant procaspase-14.

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.