SANTA CRUZ BIOTECHNOLOGY, INC.

caspase-6 p10 (C-17): sc-1230

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, Ced-3/caspase-1, is comprised of caspase-1, caspase-2, caspase-3, caspase-4, caspase-6, caspase-7 (also designated Mch3, ICE-LAP3 or CMH-1), caspase-9 and caspase-10. 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. Poly(ADP-ribose) polymerase plays an integral role in surveying for DNA mutations and double strand breaks. 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-6, but not caspase-3, has been shown to cleave the nuclear lamins which are critical to maintaining the integrity of the nuclear envelope and cellular morphology. Caspase-10 has been shown to activate caspase-3 and caspase-7 in response to apoptotic stimuli.

CHROMOSOMAL LOCATION

Genetic locus: CASP6 (human) mapping to 4q25; Casp6 (mouse) mapping to 3 G3.

SOURCE

caspase-6 p10 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of caspase-6 p10 of human 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-1230 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

caspase-6 p10 (C-17) is recommended for detection of p10 subunit and precursor of caspase-6 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-6 p10 (C-17) is also recommended for detection of p10 subunit and precursor of caspase-6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for caspase-6 siRNA (h): sc-72802, caspase-6 siRNA (m): sc-72803, caspase-6 shRNA Plasmid (h): sc-72802-SH, caspase-6 shRNA Plasmid (m): sc-72803-SH, caspase-6 shRNA (h) Lentiviral Particles: sc-72802-V and caspase-6 shRNA (m) Lentiviral Particles: sc-72803-V.

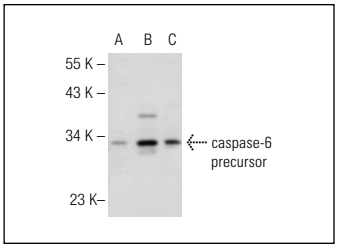
Molecular Weight of caspase-6 p10: 34 kDa.

Positive Controls: caspase-6 (h): 293T Lysate: sc-175853, Jurkat + PMA cell lysate: sc-24718 or Jurkat whole cell lysate: sc-2204.

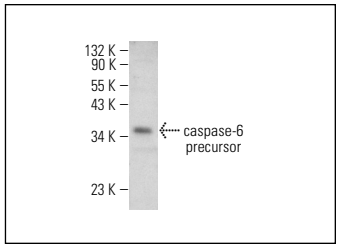
RECOMMENDED SECONDARY REAGENTS

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-6 p10 (C-17): sc-1230. Western blot analysis of caspase-6 expression in non-transfected 293T: sc-117752 (**A**), human caspase-6 transfected 293T: sc-175853 (**B**) and Jurkat (**C**) whole cell lysates.



caspase-6 p10 (C-17): sc-1230. Western blot analysis of caspase-6 precursor expression in Jurkat + PMA whole cell lysate.

SELECT PRODUCT CITATIONS

1. Licht, V., et al. 2014. Caspase-3 and caspase-6 cleave STAT1 in leukemic cells. Oncotarget 5: 2305-2317.

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.