

# cleaved caspase-9 p10 (h331): sc-22182

## 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 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: CASP9 (human) mapping to 1p36.21.

## SOURCE

cleaved caspase-9 p10 (h331) is a goat polyclonal antibody raised against a short amino acid sequence containing the neoepitope at Ala 331 of caspase-9 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-22182 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

cleaved caspase-9 p10 (h331) is recommended for detection of the p10 subunit of caspase-9 of 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); non cross-reactive with caspase-9 precursor.

Suitable for use as control antibody for caspase-9 siRNA (h): sc-29931, caspase-9 shRNA Plasmid (h): sc-29931-SH and caspase-9 shRNA (h) Lentiviral Particles: sc-29931-V.

Molecular Weight of procaspase-9: 46 kDa.

Molecular Weight of procaspase-9 p10 cleavage fragment: 10 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285.

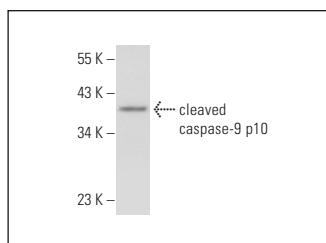
## STORAGE

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.

## DATA



cleaved caspase-9 p10 (h331): sc-22182. Western blot analysis of cleaved caspase-9 p10 expression in MIA PaCa-2 whole cell lysate.

## SELECT PRODUCT CITATIONS

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- Lepelletier, Y., et al. 2007. Prevention of mantle lymphoma tumor establishment by routing transferrin receptor toward lysosomal compartments. *Cancer Res.* 67: 1145-1154.
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- Ou, J., et al. 2013. Fibronectin extra domain A (EDA) sustains CD133+/CD44+ subpopulation of colorectal cancer cells. *Stem Cell Res.* 11: 820-833.
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