

caspase-14 p20 (M-21): sc-9641

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. Procaspace-14 can be processed *in vitro* by caspase-8 and caspase-10 but not by other caspases.

REFERENCES

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- Fernandes-Alnemri, T.F., et al. 1996. *In vitro* activation of CPP32 and Mch3 by Mch4, a novel human apoptotic cysteine protease containing two FADD-like domains. *Proc. Natl. Acad. Sci. USA* 93: 7464-7469.
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- Ahmad, M., et al. 1998. Identification and characterization of murine caspase-14, a new member of the caspase family. *Cancer Res.* 58: 5201-5205.
- Van de Craen, M., et al. 1998. Identification of a new caspase homologue: caspase-14. *Cell Death Differ.* 5: 838-846.

CHROMOSOMAL LOCATION

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

SOURCE

caspase-14 p20 (M-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of caspase-14 p20 of mouse 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-9641 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

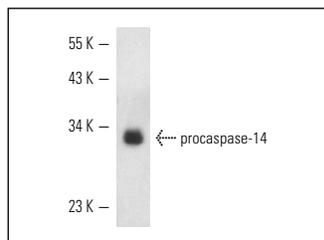
caspase-14 p20 (M-21) is recommended for detection of p20 subunit and precursor of caspase-14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (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 p20 (M-21) is also recommended for detection of p20 subunit and precursor of caspase-14 in additional species, including equine, bovine and porcine.

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 p20: 30/18/11 kDa.

DATA



caspase-14 p20 (M-21): sc-9641. Western blot analysis of human recombinant procaspase-14.

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.

MONOS
Satisfaction
Guaranteed

Try **caspase-14 (D-10): sc-48336** or **caspase-14 (C-12): sc-48395**, our highly recommended monoclonal alternatives to caspase-14 p20 (M-21).w