



**SZABO
SCANDIC**

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



caspase-7 (h): 293T Lysate: sc-176076

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.

REFERENCES

- Tiso, N., Pallavicini, A., Muraro, T., Zimbello, R., Apolloni, E., Valle, G., Lanfranchi, G. and Danieli, G.A. 1996. Chromosomal localization of the human genes, CPP32, MCH2, MCH3, and ICH1, involved in cellular apoptosis. *Biochem. Biophys. Res. Commun.* 225: 983-989.
- Cohen, G.M. 1997. Caspases: the executioners of apoptosis. *Biochem. J.* 326: 1-16.
- Chandler, J.M., Cohen, G.M. and MacFarlane, M. 1998. Different subcellular distribution of caspase-3 and caspase-7 following Fas-induced apoptosis in mouse liver. *J. Biol. Chem.* 273: 10815-10818.
- Marcelli, M., Cunningham, G.R., Walkup, M., He, Z., Sturgis, L., Kagan, C., Mannucci, R., Nicoletti, I., Teng, B. and Denner, L. 1999. Signaling pathway activated during apoptosis of the prostate cancer cell line LNCaP: overexpression of caspase-7 as a new gene therapy strategy for prostate cancer. *Cancer Res.* 59: 382-390.
- Germain, M., Affar, E.B., D'Amours, D., Dixit, V.M., Salvesen, G.S. and Poirier, G.G. 1999. Cleavage of automodified poly(ADP-ribose) polymerase during apoptosis. Evidence for involvement of caspase-7. *J. Biol. Chem.* 274: 28379-28384.

CHROMOSOMAL LOCATION

Genetic locus: CASP7 (human) mapping to 10q25.3.

PRODUCT

caspase-7 (h): 293T Lysate represents a lysate of human caspase-7 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

caspase-7 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive caspase-7 antibodies.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

caspase-7 (10.1.60): sc-81654 is recommended as a positive control antibody for Western Blot analysis of enhanced human caspase-7 expression in caspase-7 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG_κ BP-HRP: sc-516102 or m-IgG_κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



caspase-7 (10.1.60): sc-81654. Western blot analysis of procaspase-7 expression in non-transfected: sc-117752 (**A**) and human caspase-7 transfected: sc-176076 (**B**) 293T whole cell lysates.

caspase-7 (51): sc-135858. Western blot analysis of procaspase-7 expression in non-transfected: sc-117752 (**A**) and human caspase-7 transfected: sc-176076 (**B**) 293T whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.