**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 composed of caspase-1, caspase-2, caspase-3, caspase-4, caspase-6 and caspase-7 (also designated Mch3, ICE-LAP or CMH-1), caspase-9, caspase-10, caspase-14, and caspase-5/caspase-12. 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-5 (also designated TY or ICErelIII) can cleave its own precursor, an activity that requires the cysteine 246 residue. The mouse homolog of caspase-5 is designated caspase-12. Frameshift mutations in caspase-5 have been identified in MMP tumors of the endometrium, colon and stomach, indicating that caspase-5 may be a new target gene in the microsatellite mutator pathway for cancer.

**CHROMOSOMAL LOCATION**

Genetic locus: CASP12 (human) mapping to 11q22.3.

**SOURCE**

caspase-12 (H-6) is a mouse monoclonal antibody raised against amino acids 38-124 mapping near the N-terminus of caspase-12 of human origin.

**PRODUCT**

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

caspase-12 (H-6) is available conjugated to agarose (sc-515103 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515103 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-515103 PE) or Alexa Fluor® 488 (sc-515103 AF488) or Alexa Fluor® 647 (sc-515103 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

caspase-12 (H-6) is recommended for detection of caspase-12 of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for caspase-12 siRNA (h): sc-72797, caspase-12 shRNA Plasmid (h): sc-72797-SH and caspase-12 shRNA (h) Lentiviral Particles: sc-72797-V.

Molecular Weight of caspase-12: 50 kDa.

Positive Controls: human heart extract: sc-363763.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGx HRP: sc-16102 or m-IgGx BP-HRP (Cruz Marker): sc-16102-CM (dilution range: 1:1000-1:10000). 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGx BP-FITC: sc-16140 or m-IgGx BP-PE: sc-16141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-358850. 4) Immunohistochemistry: use m-IgGx BP-HRP: sc-16102 with DAB, 50X: sc-24982 and Immunohistochemical Mounting Medium: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

![Western blot analysis of caspase-12 expression in human heart tissue extract.](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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