BACKGROUND

The Ced/ICE or caspase family of cysteine proteases plays a pivotal role in mediating apoptosis through the proteolysis of specific targets. Among the targets are poly(ADP-ribose) polymerase (PARP), Gelsolin, DFF-45 (also designated ICAD, for inhibitor of CAD) and the nuclear lamins. CAD (caspase-activated deoxyribonuclease), also designated CPAN (caspase-activated nuclease) and DFF40, is a DNase that is responsible for DNA degradation during apoptosis. CAD is inhibited by DFF45/ICAD. Caspase-3 acts to dissociate CAD from ICAD, allowing CAD to enter the nucleus and degrade DNA.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: DFFB (human) mapping to 1p36.3; Dffb (mouse) mapping to 4 E2.

SOURCE

CAD (FL-338) is a rabbit polyclonal antibody raised against amino acids 1-338 representing full length CAD 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.

STORAGE

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

APPLICATIONS

CAD (FL-338) is recommended for detection of CAD 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).

Suitable for use as control antibody for CAD siRNA (h): sc-29871, CAD siRNA (m): sc-29872, CAD shRNA Plasmid (h): sc-29871-SH, CAD shRNA Plasmid (m): sc-29872-SH, CAD shRNA (h) Lentiviral Particles: sc-29871-V and CAD shRNA (m) Lentiviral Particles: sc-29872-V.

Molecular Weight of CAD: 40 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or LNCaP cell lysate: sc-2231.

DATA

CAD (FL-338): sc-8342. Western blot analysis of CAD expression in RAW 309 Cr.1 whole cell lysate.

SELECT PRODUCT CITATIONS


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.