

DEDD2 (G-13): sc-79431

BACKGROUND

Apoptosis is a physiological process by which multicellular organisms eliminate unwanted cells. DEDD (death effector domain-containing DNA binding protein) induces apoptosis by triggering a series of intracellular protein-protein interactions mediated by the N-terminal DED motif. DEDD, a cytoplasmic protein, translocates to the nucleus during CD95-mediated apoptosis, where it localizes to nucleoli-like structures, activates caspase-6 and specifically inhibits RNA polymerase I-dependent transcription. The cell death activity of DEDD relates to its nuclear localization. The DED in DEDD is sufficient for its DNA binding, caspase-6 activating and Pol I specific transcriptional repressor activity. Point specific mutations indicate that the DED in DEDD represents a novel domain that is structurally similar to other DEDs but functionally different from classical DEDs found in FADD or caspase-8. DEDD is widely expressed in a variety of tissues, with highest levels in the testis. The human DEDD gene maps to chromosome 1q23.3. Alternative splicing results in two transcript variants which encode the same protein.

REFERENCES

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3. Roth, W., Stenner-Liewen, F., Pawlowski, K., Godzik, A. and Reed, J.C. 2002. Identification and characterization of DEDD2, a death effector domain-containing protein. *J. Biol. Chem.* 277: 7501-7508.
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5. Alcivar, A., Hu, S., Tang, J. and Yang, X. 2003. DEDD and DEDD2 associate with caspase-8/10 and signal cell death. *Oncogene* 22: 291-297.

CHROMOSOMAL LOCATION

Genetic locus: DEDD2 (human) mapping to 19q13.2; Dedd2 (mouse) mapping to 7 A3.

SOURCE

DEDD2 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DEDD2 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-79431 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DEDD2 (G-13) is recommended for detection of DEDD2 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 DEDD2 siRNA (h): sc-77113, DEDD2 siRNA (m): sc-77114, DEDD2 shRNA Plasmid (h): sc-77113-SH, DEDD2 shRNA Plasmid (m): sc-77114-SH, DEDD2 shRNA (h) Lentiviral Particles: sc-77113-V and DEDD2 shRNA (m) Lentiviral Particles: sc-77114-V.

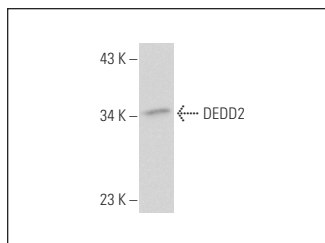
Molecular Weight of DEDD2: 36 kDa.

Positive Controls: Mouse skeletal muscle extract: sc-364250.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DEDD2 (G-13): sc-79431. Western blot analysis of DEDD2 expression in mouse skeletal muscle tissue extract.

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.