

# DEDD (H-4): sc-271192

## 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

1. Leo, C.P., et al. 1998. DEFT, a novel death effector domain-containing molecule predominantly expressed in testicular germ cells. *Endocrinology* 139: 4839-4848.
2. Stegh, A.H., et al. 1998. DEDD, a novel death effector domain-containing protein, targeted to the nucleolus. *EMBO J.* 17: 5974-5986.

## CHROMOSOMAL LOCATION

Genetic locus: DEDD (human) mapping to 1q23.3; Dedd (mouse) mapping to 1 H3.

## SOURCE

DEDD (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 278-313 near the C-terminus of DEDD of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DEDD (H-4) is available conjugated to agarose (sc-271192 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271192 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271192 PE), fluorescein (sc-271192 FITC), Alexa Fluor® 488 (sc-271192 AF488), Alexa Fluor® 546 (sc-271192 AF546), Alexa Fluor® 594 (sc-271192 AF594) or Alexa Fluor® 647 (sc-271192 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271192 AF680) or Alexa Fluor® 790 (sc-271192 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271192 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## RESEARCH USE

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

## APPLICATIONS

DEDD (H-4) is recommended for detection of DEDD of mouse, rat and 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).

DEDD (H-4) is also recommended for detection of DEDD in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DEDD siRNA (h): sc-37383, DEDD siRNA (m): sc-37384, DEDD shRNA Plasmid (h): sc-37383-SH, DEDD shRNA Plasmid (m): sc-37384-SH, DEDD shRNA (h) Lentiviral Particles: sc-37383-V and DEDD shRNA (m) Lentiviral Particles: sc-37384-V.

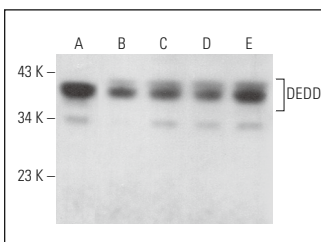
Molecular Weight of DEDD: 37 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NIH/3T3 whole cell lysate: sc-2210 or C2C12 whole cell lysate: sc-364188.

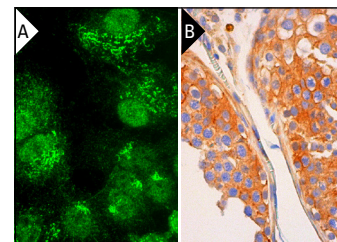
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



DEDD (H-4): sc-271192. Western blot analysis of DEDD expression in Jurkat (A), NIH/3T3 (B), C2C12 (C), Sol8 (D) and A-10 (E) whole cell lysates.



DEDD (H-4): sc-271192. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts and Leydig cells (B).

## STORAGE

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