SANTA CRUZ BIOTECHNOLOGY, INC.

EDD (D-5): sc-515423

BACKGROUND

EDD (for E3 identified by differential display) is a progestin-regulated gene that was isolated from T-47D human breast cancer cells. Based on sequence homology, EDD appears to be a human homolog of the *Drosophila* hyperplastic discs (hyd) gene, a tumor suppressor gene that is required for control of imaginal disc growth. EDD contains a HECT domain in the carboxy terminus. HECT domain-containing proteins function as ubiquitin-protein ligases, or E3 enzymes. EDD has been shown to bind to ubiquitin, and like other HECT family proteins, may function as an E3 ubiquitin-protein ligase.

REFERENCES

1. Mansfield, E., Hersperger, E., Biggs, J. and Shearn, A. 1994. Genetic and molecular analysis of hyperplastic discs, a gene whose product is required for regulation of cell proliferation in *Drosophila melanogaster* imaginal discs and germ cells. Dev. Biol. 165: 507-526.
2. Huibregtse, J.M., Scheffner, M., Beaudenon, S. and Howley, P.M. 1995. A family of proteins structurally and functionally related to the E6-AP ubiquitin-protein ligase. Proc. Natl. Acad. Sci. USA 92: 2563-2567.
3. Huibregtse, J.M., Yang, J.C. and Beaudenon, S.L. 1997. The large subunit of RNA polymerase II is a substrate of the Rsp5 ubiquitin-protein ligase. Proc. Natl. Acad. Sci. USA 94: 3656-3661.
4. Hatakeyama, S., Jensen, J.P. and Weissman, A.M. 1997. Subcellular localization and ubiquitin-conjugating enzyme (E2) interactions of mammalian HECT family ubiquitin protein ligases. J. Biol. Chem. 272: 15085-15092.
5. Callaghan, M.J., Russell, A.J., Woollatt, E., Sutherland, G.R., Sutherland, R.L. and Watts, C.K. 1998. Identification of a human HECT family protein with homology to the *Drosophila* tumor suppressor gene hyperplastic discs. Oncogene 17: 3479-3491.

CHROMOSOMAL LOCATION

Genetic locus: UBR5 (human) mapping to 8q22.3; Ubr5 (mouse) mapping to 15 B3.1.

SOURCE

EDD (D-5) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of EDD of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain 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.

PROTOCOLS

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

APPLICATIONS

EDD (D-5) is recommended for detection of EDD 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EDD siRNA (h): sc-43744, EDD siRNA (m): sc-143292, EDD shRNA Plasmid (h): sc-43744-SH, EDD shRNA Plasmid (m): sc-143292-SH, EDD shRNA (h) Lentiviral Particles: sc-43744-V and EDD shRNA (m) Lentiviral Particles: sc-143292-V.

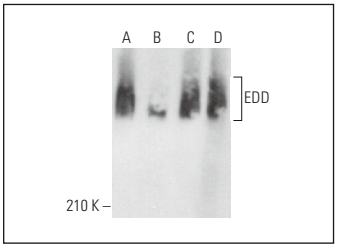
Molecular Weight of EDD: 309 kDa.

Positive Controls: A549 cell lysate: sc-2413, NTERA-2 cl.D1 whole cell lysate: sc-364181 or Hs 181 Tes whole cell lysate: sc-364779.

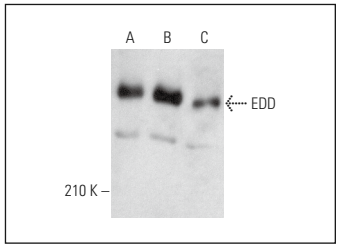
RECOMMENDED SUPPORT REAGENTS

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.

DATA



EDD (D-5): sc-515423. Western blot analysis of EDD expression in Daudi (**A**), NIH/3T3 (**B**) and F9 (**C**) whole cell lysates and mouse testis tissue extract (**D**).



EDD (D-5): sc-515423. Western blot analysis of EDD expression in A549 (**A**), NTERA-2 cl.D1 (**B**) and Hs 181 Tes (**C**) whole cell lysates.

RESEARCH USE

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