

EDD (M-19): sc-9562

BACKGROUND

EDD (for E3 identified by differential display) is a progesterin-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., et al. 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. Huijbregtse, J.M., et al. 1995. A family of proteins structurally and functionally related to the E6-AP ubiquitin-protein ligase. *Proc. Natl. Acad. Sci. USA* 92: 5249.

CHROMOSOMAL LOCATION

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

SOURCE

EDD (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EDD 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-9562 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EDD (M-19) is recommended for detection of EDD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

EDD (M-19) is also recommended for detection of EDD in additional species, including equine, canine, bovine and porcine.

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: IMR-32 nuclear extract: sc-2148.

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 Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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.

SELECT PRODUCT CITATIONS

1. Clancy, J.L., et al. 2003. EDD, the human orthologue of the hyperplastic discs tumour suppressor gene, is amplified and overexpressed in cancer. *Oncogene* 22: 5070-5081.
2. Saunders, D.N., et al. 2004. EDD, the murine hyperplastic disc gene, is essential for yolk sac vascularization and chorioallantoic fusion. *Mol. Cell. Biol.* 24: 7225-7234.
3. Fuja, T.J., et al. 2004. Somatic mutations and altered expression of the candidate tumor suppressors CSNK1 ε, DLG1, and EDD/hHYD in mammary ductal carcinoma. *Cancer Res.* 64: 942-951.
4. O'Brien, P.M., et al. 2008. The E3 ubiquitin ligase EDD is an adverse prognostic factor for serous epithelial ovarian cancer and modulates cisplatin resistance *in vitro*. *Br. J. Cancer* 98: 1085-1093.
5. Tomaic, V., et al. 2011. Regulation of the human papillomavirus type 18 E6/E6AP ubiquitin ligase complex by the HECT domain-containing protein EDD. *J. Virol.* 85: 3120-3127.
6. Hay-Koren, A., et al. 2011. The EDD E3 ubiquitin ligase ubiquitinates and up-regulates β-catenin. *Mol. Biol. Cell* 22: 399-411.

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.

PROTOCOLS

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



Try **EDD (B-11): sc-515494** or **EDD (C-3): sc-515485**, our highly recommended monoclonal alternatives to EDD (M-19).