SANTA CRUZ BIOTECHNOLOGY, INC.

# EDD (B-11): sc-515494

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

EDD (B-11) 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.

EDD (B-11) is available conjugated to agarose (sc-515494 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515494 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515494 PE), fluorescein (sc-515494 FITC), Alexa Fluor® 488 (sc-515494 AF488), Alexa Fluor® 546 (sc-515494 AF546), Alexa Fluor® 594 (sc-515494 AF594) or Alexa Fluor® 647 (sc-515494 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515494 AF680) or Alexa Fluor® 790 (sc-515494 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.



## APPLICATIONS

EDD (B-11) 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: HEL 92.1.7 cell lysate: sc-2270, Neuro-2A whole cell lysate: sc-364185 or F9 cell lysate: sc-2245.

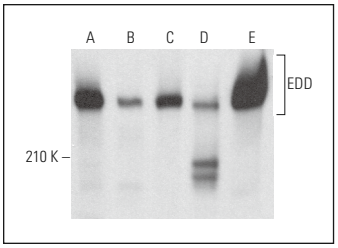
## STORAGE

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

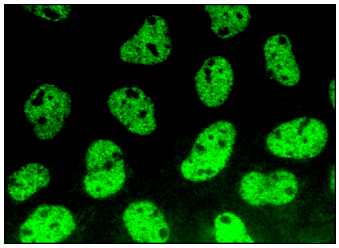
## RESEARCH USE

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

## DATA




EDD (B-11): sc-515494. Western blot analysis of EDD expression in HEL 92.1.7 (**A**), 3T3-L1 (**B**), Neuro-2A (**C**), EOC 20 (**D**) and F9 (**E**) whole cell lysates.



EDD (B-11): sc-515494. Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear localization.

## SELECT PRODUCT CITATIONS


1. Qiao, X., et al. 2020. UBR5 is co-amplified with Myc in breast tumors and encodes an ubiquitin ligase that limits Myc-dependent apoptosis. Cancer Res. 80: 1414-1427.
2. MacDonald, T.M., et al. 2020. Prolactin and androgen R1881 induce pro-survival carboxypeptidase-D and EDD E3 ligase in triple-negative and HER2+ breast cancer. Am. J. Cancer Res. 10: 1321-1343.
3. Leboeuf, D., et al. 2020. The Arg/N-degron pathway—a potential running back in fine-tuning the inflammatory response? Biomolecules 10: 903.
4. Puhach, O., et al. 2020. Murine cytomegaloviruses m139 targets DDX3 to curtail interferon production and promote viral replication. PLoS Pathog. 16: e1008546.
5. Moberg, M., et al. 2022. Acute normobaric hypoxia blunts contraction-mediated mTORC1- and JNK-signaling in human skeletal muscle. Acta Physiol. 234: e13771.
6. Horwath, O., et al. 2022. Molecular regulators of muscle mass and mitochondrial remodeling are not influenced by testosterone administration in young women. Front. Endocrinol. 13: 874748.
7. Xiang, G., et al. 2022. UBR5 targets tumor suppressor CDC73 proteolytically to promote aggressive breast cancer. Cell Death Dis. 13: 451.
8. Wu, B., et al. 2022. UBR5 promotes tumor immune evasion through enhancing IFN-γ-induced PDL1 transcription in triple negative breast cancer. Theranostics 12: 5086-5102.
9. Zhao, Y., et al. 2022. Deubiquitinase OTUD6A promotes breast cancer progression by increasing TopBP1 stability and rendering tumor cells resistant to DNA-damaging therapy. Cell Death Differ. 29: 2531-2544.


## PROTOCOLS

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