SANTA CRUZ BIOTECHNOLOGY, INC.

UBE2H (G-2): sc-515567

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

UBE2H (ubiquitin-conjugating enzyme E2H), also known as UBC8, UBCH, UBCH2 or E2-20K, is a 183 amino acid protein involved in ubiquitin-mediated protein degradation. Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). One of several members of the ubiquitin-conjugating enzyme family, UBE2H functions as an E2 ubiquitin-conjugating enzyme that acts to catalyze the covalent attachment of ubiquitin residues to various proteins, including Histone H2A. UBE2H shares 100% identity with its mouse counterpart and 98% identity with its frog and zebrafish homologs, suggesting a conserved function between species. Multiple isoforms of UBE2H exist due to alternative splicing events.

REFERENCES

1. Kaiser, P., et al. 1994. A human ubiquitin-conjugating enzyme homologous to yeast UBC8. J. Biol. Chem. 269: 8797-8802.
2. Kaiser, P., et al. 1995. Characterization of functionally independent domains in the human ubiquitin conjugating enzyme UbcH2. FEBS Lett. 377: 193-196.
3. Wefes, I., et al. 1995. Induction of ubiquitin-conjugating enzymes during terminal erythroid differentiation. Proc. Natl. Acad. Sci. USA 92: 4982-4986.
4. Hayashida, S., et al. 2000. Construction of a physical and transcript map flanking the imprinted MEST/PEG1 region at 7q32. Genomics 66: 221-225.
5. Vourc'h, P., et al. 2003. Mutation screening and association study of the UBE2H gene on chromosome 7q32 in autistic disorder. Psychiatr. Genet. 13: 221-225.

CHROMOSOMAL LOCATION

Genetic locus: UBE2H (human) mapping to 7q32.2; Ube2h (mouse) mapping to 6 A3.3.

SOURCE

UBE2H (G-2) is a mouse monoclonal antibody raised against amino acids 1-183 representing full length UBE2H 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.

UBE2H (G-2) is available conjugated to agarose (sc-515567 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515567 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515567 PE), fluorescein (sc-515567 FITC), Alexa Fluor® 488 (sc-515567 AF488), Alexa Fluor® 546 (sc-515567 AF546), Alexa Fluor® 594 (sc-515567 AF594) or Alexa Fluor® 647 (sc-515567 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515567 AF680) or Alexa Fluor® 790 (sc-515567 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

UBE2H (G-2) is recommended for detection of UBE2H 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 UBE2H siRNA (h): sc-89802, UBE2H siRNA (m): sc-106659, UBE2H shRNA Plasmid (h): sc-89802-SH, UBE2H shRNA Plasmid (m): sc-106659-SH, UBE2H shRNA (h) Lentiviral Particles: sc-89802-V and UBE2H shRNA (m) Lentiviral Particles: sc-106659-V.

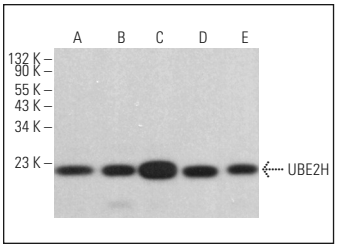
Molecular Weight of UBE2H: 21 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, JAR cell lysate: sc-2276 or A2058 whole cell lysate: sc-364178.

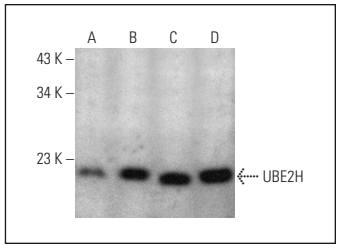
RECOMMENDED SUPPORT REAGENTS

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



UBE2H (G-2): sc-515567. Western blot analysis of UBE2H expression in NIH/3T3 (**A**), Neuro-2A (**B**), WEHI-231 (**C**), OVCAR-3 (**D**) and Raji (**E**) whole cell lysates.



UBE2H (G-2): sc-515567. Western blot analysis of UBE2H expression in HeLa (**A**), JAR (**B**), A2058 (**C**) and OV-90 (**D**) whole cell lysates.

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 for detailed protocols and support products.