

UBE2H (D-14): sc-131817

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., Seufert, W., Höfner, L., Kofler, B., Sachsenmaier, C., Herzog, H., Jentsch, S., Schweiger, M. and Schneider, R. 1994. A human ubiquitin-conjugating enzyme homologous to yeast UBC8. *J. Biol. Chem.* 269: 8797-8802.
2. Kaiser, P., Mandl, S., Schweiger, M. and Schneider, R. 1995. Characterization of functionally independent domains in the human ubiquitin conjugating enzyme UBCH2. *FEBS Lett.* 377: 193-196.
3. Wefes, I., Mastrandrea, L.D., Haldeman, M., Koury, S.T., Tamburlin, J., Pickart, C.M. and Finley, D. 1995. Induction of ubiquitin-conjugating enzymes during terminal erythroid differentiation. *Proc. Natl. Acad. Sci. USA* 92: 4982-4986.
4. Hayashida, S., Yamasaki, K., Asada, Y., Soeda, E., Niikawa, N. and Kishino, T. 2000. Construction of a physical and transcript map flanking the imprinted MEST/Peg1 region at 7q32. *Genomics* 66: 221-225.
5. Vourc'h, P., Martin, I., Bonnet-Brilhault, F., Marouillat, S., Barthélémy, C., Pierre Müh, J. and Andres, C. 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 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UBE2H 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-131817 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UBE2H (D-14) is recommended for detection of UBE2H 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); non cross-reactive with other UBE2 family members.

UBE2H (D-14) is also recommended for detection of UBE2H in additional species, including equine, canine, bovine, porcine and avian.

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.

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.

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 **UBE2H (G-2): sc-515567** or **UBE2H (18-Z): sc-100620**, our highly recommended monoclonal alternatives to UBE2H (D-14).