

UBC8 (k1H3): sc-135629

BACKGROUND

Ubiquitin is an abundant, highly conserved protein found in all eukaryotic cells, either free or covalently attached to cellular proteins. The primary function of ubiquitin in mammalian systems is to clear abnormal, foreign and improperly folded proteins by targeting them for proteasome degradation. Ubiquitin conjugating enzyme 8 (UBC8) is an E2 enzyme involved in the ubiquitin pathway for protein degradation. Like other E2 enzymes, UBC8 forms a thioester bond with ubiquitin in an E1-dependent manner. UBC8 binds to the human homolog of *Drosophila ariadne* (HHARI) and UBC7-associated protein (H7-AP1) as well as double RING-finger protein (Dorfin). UBC8 is enriched in the central nervous system and interacts with Parkin, a RING-finger-containing protein implicated in the pathogenesis of familial Parkinson's disease. Parkin shares sequence homology with other UBC8 binding proteins such as HHARI and H7-AP1.

REFERENCES

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4. Kimura, M., et al. 1997. cDNA cloning, characterization, and chromosome mapping of UBE2E2 encoding a human ubiquitin-conjugating E2 enzyme. *Cytogenet. Cell Genet.* 78: 107-111.
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6. Tan, N.G., et al. 2000. Characterisation of the human and mouse orthologues of the *Drosophila ariadne* gene. *Cytogenet. Cell Genet.* 90: 242-245.
7. Zhang, Y., et al. 2000. Parkin functions as an E2-dependent ubiquitin-protein ligase and promotes the degradation of the synaptic vesicle-associated protein, CDCrel-1. *Proc. Natl. Acad. Sci. USA* 97: 13354-13359.
8. Imai, Y., et al. 2000. Parkin suppresses unfolded protein stress-induced cell death through its E3 ubiquitin-protein ligase activity. *J. Biol. Chem.* 275: 35661-35664.
9. Niwa, J., et al. 2001. A novel centrosomal RING-finger protein, Dorfin, mediates ubiquitin ligase activity. *Biochem. Biophys. Res. Commun.* 281: 706-713.

CHROMOSOMAL LOCATION

Genetic locus: UBE2L6 (human) mapping to 11q12.1.

SOURCE

UBC8 (k1H3) is a mouse monoclonal antibody raised against full-length recombinant UBC8 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

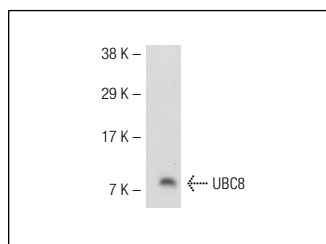
UBC8 (k1H3) is recommended for detection of UBC8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for UBC8 siRNA (h): sc-41685, UBC8 shRNA Plasmid (h): sc-41685-SH and UBC8 shRNA (h) Lentiviral Particles: sc-41685-V.

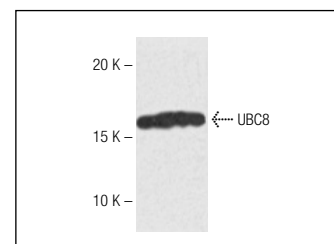
Molecular Weight of UBC8: 19 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or MCF7 whole cell lysate: sc-2206.

DATA



UBC8 (k1H3): sc-135629. Western blot analysis of UBC8 expression in SK-N-MC whole cell lysate.



UBC8 (k1H3): sc-135629. Western blot analysis of UBC8 expression in MCF7 whole cell lysate.

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.