

D8S2298E (Q-15): sc-87064

BACKGROUND

Ubiquitin (Ub) is a highly conserved protein in eukaryotic cells. Ubiquitination is utilized in cells to control the stability, function and subcellular localization of proteins. Many cellular processes are regulated by ubiquitination, which requires high substrate specificity of the ubiquitination machinery as well as the existence of diverse downstream effector proteins interacting with ubiquitinated substrates. Most of these cellular effectors are characterized by a modular composition of ubiquitin-binding motifs and further domains mediating specific functions. The most highly characterized ubiquitin-related protein motifs include the UBA, UIM, UBD and UBX domains. D8S2298E, also designated UBX domain-containing protein 8 (UBXN8), UBX domain-containing protein 6 (UBXD6) or Reproduction 8 protein (REP-8), is a 270 amino acid protein that is expressed as 3 isoforms due to alternative splicing events. D8S2298E is expressed in testis and ovary, as well as during early and late embryonic stages, implicating a role for D8S2298E in reproduction and embryogenesis.

REFERENCES

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2. Ciechanover, A., et al. 1994. The ubiquitin-mediated proteolytic pathway: mechanisms of recognition of the proteolytic substrate and involvement in the degradation of native cellular proteins. *FASEB J.* 8: 182-191.
3. Hochstrasser, M. 1995. Ubiquitin, proteasomes, and the regulation of intracellular protein degradation. *Curr. Opin. Cell Biol.* 7: 215-223.
4. Jennissen, H.P. 1995. Ubiquitin and the enigma of intracellular protein degradation. *Eur. J. Biochem.* 231: 1-30.
5. Pagano, M., et al. 1995. Role of the ubiquitin-proteasome pathway in regulating abundance of the cyclin-dependent kinase inhibitor p27. *Science* 269: 682-685.
6. Yamabe, Y., et al. 1997. Cloning and characterization of Rep-8 (D8S2298E) in the human chromosome 8p11.2-p12. *Genomics* 39: 198-204.
7. Yamabe, Y., et al. 1999. Structures of mouse Rep-8 cDNA and genomic clones. *Gene* 227: 39-47.
8. Buchberger, A. 2002. From UBA to UBX: new words in the ubiquitin vocabulary. *Trends Cell Biol.* 12: 216-221.

CHROMOSOMAL LOCATION

Genetic locus: UBXN8 (human) mapping to 8p12.

SOURCE

D8S2298E (Q-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of D8S2298E of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87064 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

D8S2298E (Q-15) is recommended for detection of D8S2298E 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)], 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).

D8S2298E (Q-15) is also recommended for detection of D8S2298E in additional species, including equine, canine and bovine.

Suitable for use as control antibody for D8S2298E siRNA (h): sc-77439, D8S2298E shRNA Plasmid (h): sc-77439-SH and D8S2298E shRNA (h) Lentiviral Particles: sc-77439-V.

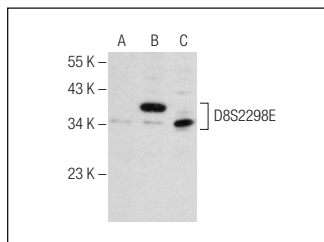
Molecular Weight of D8S2298E: 31 kDa.

Positive Controls: D8S2298E (h): 293T Lysate: sc-370785 or OV-90 whole cell lysate: sc-364191.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



D8S2298E (Q-15): sc-87064. Western blot analysis of D8S2298E expression in non-transfected 293T: sc-117752 (A), human D8S2298E transfected 293T: sc-370785 (B) and OV-90 (C) whole cell lysates.

RESEARCH USE

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