

UBE2D1 (h): 293T Lysate: sc-174557

BACKGROUND

UBE2D1 (ubiquitin-conjugating enzyme E2D1 or UBC5A), UBE2D2 (ubiquitin-conjugating enzyme E2D2 or UBC5B) and UBE2D3 (ubiquitin-conjugating enzyme E2D3 or UBC5C) are E2 ubiquitin-conjugating enzymes, components of the protein ubiquitination pathway. Protein ubiquitination covalent modification targets proteins for 26 S proteasome-dependent degradation. Three classes of enzymes influence the conjugation mechanism of ubiquitin to protein. E1 ubiquitin-activating enzymes mediate ATP-dependent charging of ubiquitin via formation of a high energy thiol ester bond between the C-terminus of ubiquitin and a cysteine within itself. Thiol ester-linked ubiquitin is then transferred from E1 to a cysteine residue in an E2 ubiquitin-conjugating enzyme. E2 enzymes in conjunction with E3 ubiquitin-protein ligases transfer ubiquitin monomers and polyubiquitin chains to the substrate target protein, where stable isopeptide linkages are formed.

REFERENCES

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- Houben, K., et al. 2004. Solution structure of the ubiquitin-conjugating enzyme UBCH5B. *J. Mol. Biol.* 344: 513-526.
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CHROMOSOMAL LOCATION

Genetic locus: UBE2D1 (human) mapping to 10q21.1.

PRODUCT

UBE2D (h): 293T Lysate represents a lysate of human UBE2D transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

UBE2D (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive UBE2D antibodies. Recommended use: 10-20 μ l per lane.

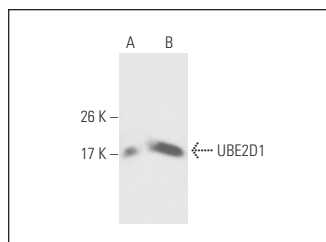
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

UBE2D (F-6): sc-166277 is recommended as a positive control antibody for Western Blot analysis of enhanced human UBE2D expression in UBE2D transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



UBE2D (F-6): sc-166277. Western blot analysis of UBE2D1 expression in non-transfected: sc-117752 (A) and human UBE2D1 transfected: sc-174557 (B) 293T whole cell lysates.

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.