

UBE2F (m): 293T Lysate: sc-124413

BACKGROUND

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). UBE2F (ubiquitin-conjugating enzyme E2F), also known as NCE2, is a 185 amino acid protein that belongs to the E2 family of ubiquitin conjugating enzymes. UBE2F functions to accept the ubiquitin-like protein NEDD8 from an E1 complex and to catalyze the ATP-dependent attachment of NEDD8 to other proteins, playing a role in the pathway of protein degradation. The gene encoding UBE2F maps to chromosome 2, which encodes over 1,400 genes and comprises nearly 8% of the human genome.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Ciechanover, A. 1994. The ubiquitin-proteasome proteolytic pathway. *Cell* 79: 13-21.
3. Gong, L. and Yeh, E.T. 1999. Identification of the activating and conjugating enzymes of the NEDD8 conjugation pathway. *J. Biol. Chem.* 274: 12036-12042.
4. Podust, V.N., et al. 2000. A Nedd8 conjugation pathway is essential for proteolytic targeting of p27^{Kip1} by ubiquitination. *Proc. Natl. Acad. Sci. USA* 97: 4579-4584.
5. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.

CHROMOSOMAL LOCATION

Genetic locus: Ube2f (mouse) mapping to 1 D.

PRODUCT

UBE2F (m): 293T Lysate represents a lysate of mouse UBE2F transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

UBE2F (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive UBE2F antibodies. Recommended use: 10-20 µl per lane.

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

UBE2F (C-11): sc-398668 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse UBE2F expression in UBE2F transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

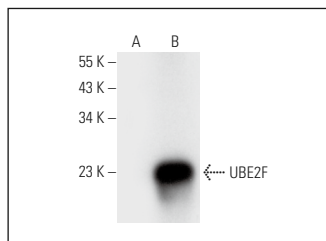
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-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.

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.

DATA



UBE2F (C-11): sc-398668. Western blot analysis of UBE2F expression in non-transfected: sc-117752 (A) and mouse UBE2F transfected: sc-124413 (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.