SANTA CRUZ BIOTECHNOLOGY, INC.

UBE2F (I-12): sc-137891



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

- 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.
- Gong, L., et al. 1999. Identification of the activating and conju-gating enzymes of the NEDD8 conjugation pathway. J. Biol. Chem. 274: 12036-12042.
- 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.
- 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 (human) mapping to 2q37.3; Ube2f (mouse) mapping to 1 D.

SOURCE

UBE2F (I-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of UBE2F of human origin.

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-137891 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

UBE2F (I-12) is recommended for detection of UBE2F of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other UBE2 family members.

UBE2F (I-12) is also recommended for detection of UBE2F in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for UBE2F siRNA (h): sc-94988, UBE2F siRNA (m): sc-154852, UBE2F shRNA Plasmid (h): sc-94988-SH, UBE2F shRNA Plasmid (m): sc-154852-SH, UBE2F shRNA (h) Lentiviral Particles: sc-94988-V and UBE2F shRNA (m) Lentiviral Particles: sc-154852-V.

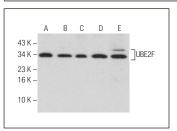
Molecular Weight of UBE2F isoforms: 24/21/18/14/11 kDa.

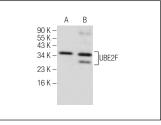
Positive Controls: UBE2F (m): 293T Lysate: sc-124413, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

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) Immunofluo-rescence: 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





UBE2F (I-12): sc-137891. Western blot analysis of UBE2F expression in Jurkat (A), HeLa (B), A-375 (C) and HL-60 (D) whole cell lysates and mouse liver tissue extract (E).

UBE2F (I-12): sc-137891. 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.

