

UBE2A/B (H-75): sc-30078

BACKGROUND

The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the conjugation of Ub and Ub-like molecules to specific protein substrates. The first step requires the ATP-dependent activation of the Ub C-terminus and the assembly of multi-Ub chains by the Ub-activating enzyme known as the E1 component. The Ub chain is then conjugated to the Ub-conjugating enzyme (E2) to generate an intermediate Ub-E2 complex. The Ub-ligase (E3) then catalyzes the transfer of Ub from E2 to the appropriate protein substrate. UBE2A (Ubiquitin-conjugating enzyme E2 A) and UBE2B (Ubiquitin-conjugating enzyme E2 B) are both Ub-conjugating enzymes that are essential to postreplication repair of UV-damaged DNA. UBE2A and UBE2B are both nuclear and cell membrane proteins that have been found to interact with Rad18.

REFERENCES

1. Ciechanover, A. 1994. The ubiquitin-proteasome proteolytic pathway. *Cell* 79: 13-21.
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.

CHROMOSOMAL LOCATION

Genetic locus: UBE2A (human) mapping to Xq24, UBE2B (human) mapping to 5q31.1; Ube2a (mouse) mapping to X A3.3, Ube2b (mouse) mapping to 11 B1.3.

SOURCE

UBE2A/B (H-75) is a rabbit polyclonal antibody raised against amino acids 1-75 mapping at the N-terminus of UBE2A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

UBE2A/B (H-75) is recommended for detection of UBE2A and UBE2B of mouse, rat and 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).

UBE2A/B (H-75) is also recommended for detection of UBE2A and UBE2B in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for UBC2 siRNA (h): sc-41677, UBC2 siRNA (m): sc-41678, UBC2 shRNA Plasmid (h): sc-41677-SH, UBC2 shRNA Plasmid (m): sc-41678-SH, UBC2 shRNA (h) Lentiviral Particles: sc-41677-V and UBC2 shRNA (m) Lentiviral Particles: sc-41678-V.

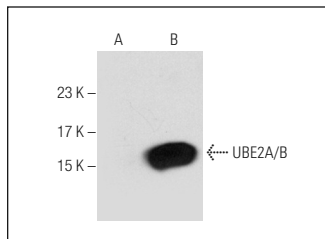
Molecular Weight of UBE2A/B: 17 kDa.

Positive Controls: UBC2 (m): 293T Lysate: sc-124403.

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



UBE2A/B (H-75): sc-30078. Western blot analysis of UBE2A/B expression in non-transfected: sc-117752 (A) and mouse UBC2 transfected: sc-124403 (B) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **UBE2A/B (G-9): sc-365507**, our highly recommended monoclonal alternative to UBE2A/B (H-75).