

UBC13 (H-75): sc-292618

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). UBC13, also known as UBE2N or BLU, is a 152 amino acid member of the E2 ubiquitin-conjugating enzyme family. Existing as a heterodimer with Mms2 (also known as UBE2V2), UBC13 catalyzes the ATP-dependent synthesis of non-canonical polyubiquitin chains, a process that does not lead to proteasomal degradation. Additionally, UBC13 mediates the transcription of several target genes and is thought to play a role in cell cycle progression, cellular differentiation and DNA repair mechanisms that ensure cell survival after DNA damage.

REFERENCES

1. Yamaguchi, T., et al. 1996. Cloning and expression of cDNA encoding a human ubiquitin-conjugating enzyme similar to the *Drosophila* bendless gene product. *J. Biochem.* 120: 494-497.
2. Hoegge, C., et al. 2002. Rad6-dependent DNA repair is linked to modification of PCNA by ubiquitin and SUMO. *Nature* 419: 135-141.

CHROMOSOMAL LOCATION

Genetic locus: UBE2N (human) mapping to 12q22; Ube2n (mouse) mapping to 10 C2.

SOURCE

UBC13 (H-75) is a rabbit polyclonal antibody raised against amino acids 1-75 mapping at the N-terminus of UBC13 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

UBC13 (H-75) is recommended for detection of UBC13 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).

UBC13 (H-75) is also recommended for detection of UBC13 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for UBC13 siRNA (h): sc-43551, UBC13 siRNA (m): sc-43553, UBC13 shRNA Plasmid (h): sc-43551-SH, UBC13 shRNA Plasmid (m): sc-43553-SH, UBC13 shRNA (h) Lentiviral Particles: sc-43551-V and UBC13 shRNA (m) Lentiviral Particles: sc-43553-V.

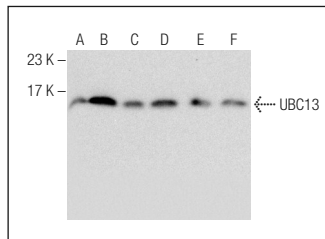
Molecular Weight of UBC13: 17 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

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



UBC13 (H-75): sc-292618. Western blot analysis of UBC13 expression in BJAB (A), CCRF-CEM (B), Jurkat (C), Hep G2 (D), C6 (E) and NIH/3T3 (F) 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 **UBC13 (F-10): sc-376470** or **UBC13/UBE2NL (C-9): sc-365722**, our highly recommended monoclonal alternatives to UBC13 (H-75).