

UBE1 (N-20): sc-47555

BACKGROUND

The ubiquitin activating enzyme E1 (UBE1) catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation. UBE1 activates ubiquitin by first adenylating with ATP its carboxy-terminal glycine residue and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding an ubiquitin-E1 thioester and free AMP. UBE1 is an example of an X-Y homologous gene, which is X-linked with a distinct Y-linked gene in many mammals. However, no UBE1 homolog is detectable on the human Y chromosome. UBE1 is thought to escape X inactivation in humans.

REFERENCES

1. Handley, P.M., et al. 1991. Molecular cloning, sequence, and tissue distribution of the human ubiquitin-activating enzyme E1. *Proc. Nat. Acad. Sci. USA* 88: 258-262.
2. Disteche, C.M., et al. 1992. Mapping and expression of the ubiquitin-activating enzyme E1 (UBE1) gene in the mouse. *Mamm. Genome* 3: 156-161.

CHROMOSOMAL LOCATION

Genetic locus: UBA1 (human) mapping to Xp11.23; Uba1 (mouse) mapping to X A1.3.

SOURCE

UBE1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of UBE1 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.

Blocking peptide available for competition studies, sc-47555 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UBE1 (N-20) is recommended for detection of UBE1 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); may cross-react with Sby in mouse.

UBE1 (N-20) is also recommended for detection of UBE1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UBE1 siRNA (h): sc-61750, UBE1 siRNA (m): sc-61751, UBE1 shRNA Plasmid (h): sc-61750-SH, UBE1 shRNA Plasmid (m): sc-61751-SH, UBE1 shRNA (h) Lentiviral Particles: sc-61750-V and UBE1 shRNA (m) Lentiviral Particles: sc-61751-V.

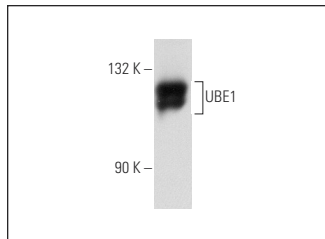
Molecular Weight of UBE1: 110 kDa.

Positive Controls: UBE1 (h): 293T Lysate: sc-171710, HeLa nuclear extract: sc-2120 or Jurkat whole cell lysate: sc-2204.

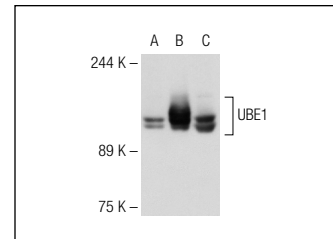
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



UBE1 (N-20): sc-47555. Western blot analysis of UBE1 expression in HeLa nuclear extract.



UBE1 (N-20): sc-47555. Western blot analysis of UBE1 expression in non-transfected: sc-11752 (A) and human UBE1 transfected: sc-171710 (B) 293T whole cell lysates and HeLa nuclear extract (C).

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.



Try **UBE1 (2G2): sc-53555** or **UBE1 (D-8): sc-515424**, our highly recommended monoclonal alternatives to UBE1 (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **UBE1 (2G2): sc-53555**.