

# UBE2C (C-12): sc-47543

## 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. UBE2C, also designated UBCH10 in human, is an E2 ubiquitin conjugating enzyme for the anaphase promoting complex (APC), which coordinates mitosis and G<sub>1</sub> by sequentially promoting the degradation of key cell-cycle regulators. UBE2C is overexpressed in many different types of cancers and may be a potential therapeutic target.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: UBE2C (human) mapping to 20q13.12; Ube2c (mouse) mapping to 2 H3.

## SOURCE

UBE2C (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of UBE2C of human origin.

## STORAGE

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

## 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-47543 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

UBE2C (C-12) is recommended for detection of UBE2C isoforms 1, 3 and 4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

UBE2C (C-12) is also recommended for detection of UBE2C isoforms 1, 3 and 4 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for UBE2C siRNA (h): sc-61742, UBE2C siRNA (m): sc-61743, UBE2C shRNA Plasmid (h): sc-61742-SH, UBE2C shRNA Plasmid (m): sc-61743-SH, UBE2C shRNA (h) Lentiviral Particles: sc-61742-V and UBE2C shRNA (m) Lentiviral Particles: sc-61743-V.

Molecular Weight of UBE2C: 20 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or SW480 cell lysate: sc-2219.

## 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) 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.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **UBE2C (B-12): sc-166339** or **UBE2C (B-4): sc-166499**, our highly recommended monoclonal alternatives to UBE2C (C-12).