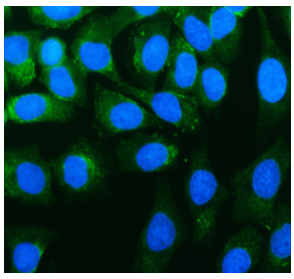
# UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody (FY13503)

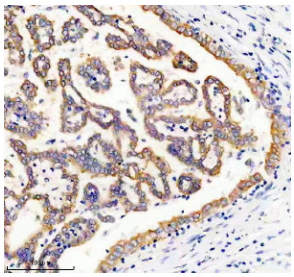
| Catalog No. | Formulation | Size |
|---|---|---|
| FY13503 | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml | 100 ug |

**Bulk quote request**

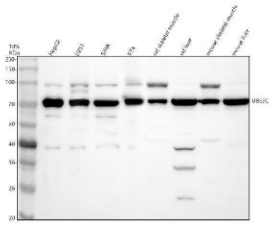
| | |
|---|---|
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Lyophilized |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen Affinity |
| **Buffer** | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4 |
| **UniProt** | Q15386 |
| **Applications** | Western Blot: 0.5-1ug/ml<br>Immunohistochemistry (FFPE): 2-5ug/ml<br>Immunofluorescence: 5ug/ml<br>ELISA: 0.1-0.5ug/ml |
| **Limitations** | This UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody is available for research use only. |



UBE3C Antibody in Human SiHa Cervical Cancer Cells IF. Immunofluorescence staining of human SiHa cervical cancer cells with UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody at 5 ug/ml. Enzyme-mediated antigen retrieval was performed for 15 min, followed by blocking with 10% goat serum. Cells were incubated with the primary antibody overnight at 4oC. Fluoro488-conjugated goat anti-rabbit IgG was used as the secondary antibody at 1:500 for 30 min at 37oC, and nuclei were counterstained with DAPI (blue). UBE3C staining (green) is observed predominantly in the cytoplasmic region. This UBE3C Antibody enables visualization of Ubiquitin Protein Ligase E3C expression and localization in human cervical cancer cells.



UBE3C Antibody in Human Lung Cancer IHC. Immunohistochemistry staining of FFPE human lung cancer tissue with UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody at 2 ug/ml. Heat-induced epitope retrieval (HIER) was performed in EDTA buffer, pH 8.0, followed by blocking with 10% goat serum. The tissue was incubated with the primary antibody overnight at 4oC, followed by a peroxidase-conjugated goat anti-rabbit IgG secondary antibody for 30 min at 37oC and DAB detection. UBE3C staining is observed in the lung tumor cells. This UBE3C Antibody demonstrates detection of Ubiquitin Protein Ligase E3C in human lung cancer tissue.



UBE3C Antibody in Human, Rat and Mouse Samples WB. Western blot testing of UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody using lysates from 1) human HepG2 cells, 2) human U251 glioma cells, 3) human SiHa cervical cancer cells, 4) human RT4 bladder cancer cells, 5) rat small intestine, 6) rat liver, 7) mouse small intestine and 8) mouse liver. The antibody was used at 0.5 ug/ml overnight at 4oC. A prominent band is detected at approximately 70 kDa. The predicted molecular weight of full-length UBE3C is approximately 124 kDa.

## Description

UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody targets UBE3C, a HECT-type E3 ubiquitin-protein ligase involved in the ubiquitin-proteasome system. UBE3C, also known as HECTH2, participates in the selective ubiquitination of proteins destined for proteasomal processing and degradation. E3 ubiquitin ligases provide substrate specificity within the ubiquitination pathway, helping cells regulate protein abundance, remove damaged or misfolded proteins and maintain protein homeostasis.

UBE3C contains a C-terminal HECT domain characteristic of the HECT family of E3 ubiquitin ligases. Unlike RING-type E3 enzymes, HECT ligases form a transient thioester intermediate with ubiquitin before transferring ubiquitin to a substrate. Through this catalytic mechanism, UBE3C contributes to the formation and extension of ubiquitin chains on target proteins. A UBE3C Antibody can support research into ubiquitination, E3 ligase activity and the molecular mechanisms controlling ubiquitin-dependent protein turnover.

UBE3C has a particularly close functional relationship with the proteasome. The protein associates with the proteasomal degradation machinery and has been implicated in extending ubiquitin chains on proteasome-bound substrates, a process that can promote efficient degradation of proteins that might otherwise escape processing. This activity connects UBE3C with protein quality control and the maintenance of cellular proteostasis. Regulation of ubiquitin chain architecture and substrate processing is important for controlling the stability of proteins involved in signaling, cell-cycle progression and stress responses.

Altered UBE3C expression has also been investigated in cancer. Increased expression has been reported in several malignancies, and studies have explored its potential influence on tumor cell proliferation, survival, migration and treatment response. Because ubiquitin-dependent degradation can alter the abundance of regulatory and signaling proteins, dysregulation of E3 ligases such as UBE3C may contribute to changes in pathways that control cellular growth and disease progression. These connections make UBE3C relevant to research spanning proteostasis, ubiquitin biology and cancer-associated signaling.

NSJ Bioreagents provides antibodies for research into ubiquitination, protein degradation and cellular regulatory pathways. A Ubiquitin Protein Ligase E3C Antibody can support studies of UBE3C expression, HECT-type E3 ligase biology, ubiquitin-dependent proteasomal degradation and mechanisms of cellular protein quality control.

UBE3C regulates protein stability through ubiquitination and proteasomal degradation, processes that can influence the abundance and activity of signaling proteins; explore related targets on our Signal Transduction Antibodies page.

## Application Notes

Optimal dilution of the UBE3C Antibody / Ubiquitin Protein Ligase E3C Antibody should be determined by the researcher.

## Immunogen

E.coli-derived human Ubiquitin Protein Ligase E3C recombinant protein (amino acids G18-Y982) was used as the immunogen for the UBE3C Antibody.

## Storage

After reconstitution, the UBE3C Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

## Alternate Names

UBE3C antibody, Ubiquitin protein ligase E3C antibody, E3 ubiquitin-protein ligase UBE3C antibody, HECTH2 antibody


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