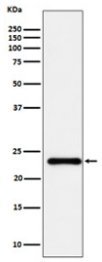
UBE2T Antibody / HSPC150 [clone 31U48] (FY13176)

Catalog No.	Formulation	Size
FY13176	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

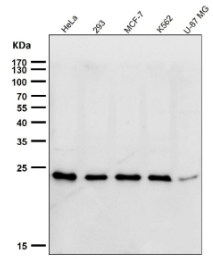
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31U48
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9NPD8
Applications	Western blot: 1:500-1:2000
Limitations	This UBE2T antibody is available for research use only.



Western blot analysis of HSPC150 expression in human HeLa cell lysate using UBE2T antibody. Predicted molecular weight ~22 kDa.



Western blot testing of human samples using the UBE2T antibody at 1:1000 dilution for 1 hour at room temperature. Predicted molecular weight ~22 kDa.

Description

UBE2T antibody detects Ubiquitin-conjugating enzyme E2 T, encoded by the UBE2T gene. Ubiquitin-conjugating enzyme E2 T is a member of the E2 family of enzymes that work with E1 activating enzymes and E3 ligases to attach ubiquitin to target proteins. This modification can regulate protein degradation, localization, or activity. UBE2T is best known for its role in the Fanconi anemia DNA repair pathway, where it is required for monoubiquitination of FANCD2 and FANCI. UBE2T antibody provides researchers with a specific reagent to study DNA repair, genome stability, and ubiquitin signaling.

Ubiquitin-conjugating enzyme E2 T functions by transferring activated ubiquitin from the E1 enzyme to E3 ligases, which then attach ubiquitin to substrates. Research using UBE2T antibody has shown that this enzyme is critical for DNA crosslink repair. Monoubiquitination of FANCD2-FANCI is a central step in activating the Fanconi anemia pathway, allowing recruitment of downstream repair proteins to stalled replication forks. Without UBE2T activity, this repair process fails, resulting in genomic instability and increased sensitivity to DNA crosslinking agents.

Mutations in UBE2T cause a subtype of Fanconi anemia, a genetic disorder characterized by bone marrow failure, developmental abnormalities, and cancer predisposition. Studies with UBE2T antibody have revealed that patient-derived mutations impair the enzyme's ability to transfer ubiquitin, leading to defective DNA repair. Because of this essential function, UBE2T has emerged as a critical component of genome maintenance.

Beyond inherited disease, UBE2T is implicated in cancer. Research using UBE2T antibody has demonstrated that the protein is frequently overexpressed in tumors such as breast, lung, and prostate cancers. Elevated levels enhance DNA repair capacity and promote resistance to chemotherapy. UBE2T overexpression also correlates with tumor aggressiveness, making it a potential prognostic biomarker and therapeutic target. Inhibiting UBE2T could sensitize cancer cells to DNA damaging therapies.

UBE2T antibody is applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting confirms protein levels across tissues, immunohistochemistry reveals expression patterns in tumors, and immunofluorescence localizes UBE2T in nuclei of proliferative cells. These applications make UBE2T antibody valuable for research into DNA repair and cancer biology.

By providing validated UBE2T antibody reagents, NSJ Bioreagents supports research into ubiquitin signaling, Fanconi anemia, and cancer. Detection of Ubiquitin-conjugating enzyme E2 T provides insight into how ubiquitin transfer contributes to genome stability and disease.

For additional information on UBE2T and its role in ubiquitination and DNA damage repair, see our UBE2T Antibody / Ubiquitin-conjugating Enzyme E2 T page.

Application Notes

Optimal dilution of the UBE2T antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human HSPC150 was used as the immunogen for the UBE2T antibody.

Storage

Store the UBE2T antibody at -20oC.

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