

Human UBE2W Protein (His Tag)

Catalog Number: 12725-H07E



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

UBC-16; UBC16; 6130401J04Rik

Protein Construction:

A DNA sequence encoding the human UBE2W (Q96B02-12) (Met 1-Cys 151) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human UBE2W comprises 166 amino acids and has a predicted molecular mass of 19.2 kDa. It migrates as an approximately 18kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 100mM Arg.0.1% Brij35, pH 8.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

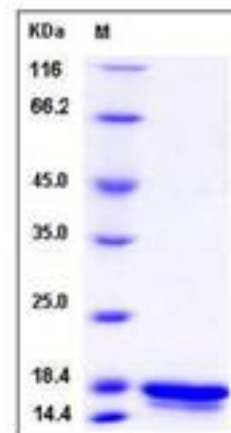
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Ubiquitin-conjugating enzymes, also known as UBE2W, E2 enzymes and more rarely as ubiquitin-carrier enzymes, perform the second step of protein ubiquitination. The modification of protein with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. UBE2W is a member of the E2 ubiquitin-conjugating enzyme family. This enzyme is required for post-replicative DNA damage repair. It accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. It also catalyzes monoubiquitination and "Lys-11"-linked polyubiquitination. UBE2W is also considered to regulate FANCD2 monoubiquitination. UBE2W exhibits ubiquitin conjugating enzyme activity and catalyzes the monoubiquitination of PHD domain of Fanconi anemia complementation group L (FANCL). Over-expression of UBE2W in cells promotes the monoubiquitination of FANCD2 and down-regulated UBE2W markedly reduces the UV irradiation-induced but not MMC-induced FANCD2 monoubiquitination.

References

- 1.Zhang Y, *et al.* (2008) Generation of mouse UBE2W antibody and analysis of UBE2W expression in mouse tissues. *Sheng Wu Gong Cheng Xue Bao.* 24(4): 547-52.
- 2.Scaglione KM, *et al.* (2011) Ube2w and ataxin-3 coordinately regulate the ubiquitin ligase CHIP. *Mol Cell.* 43(4): 599-612.
- 3.Zhang Y, *et al.* (2011) UBE2W interacts with FANCL and regulates the monoubiquitination of Fanconi anemia protein FANCD2. *Mol Cells.* 31(2): 113-22.

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