## Recombinant Human UBE2W Protein (His Tag)

## Catalog Number: PKSH030788

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human UBE2W protein Met 1-Cys 151, with an N-terminal His
Calculated MW	19.2 kDa
Observed MW	18 kDa
Accession	Q96B02-12
Bio-activity	Not validated for activity
Properties	
Purity	>97% as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 100mM Arg.0.1% Brij35, pH 8.5
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.



KDa	MK	R
116	-	
66.2	-	
45.0	-	
35.0	-	
25.0	-	
18.4 14.4	= 1	-

> 97 % as determined by reducing SDS-PAGE.

## Background

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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. UBE2W exhibits ubiquitin conjugating enzyme activity and catalyzes the 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.