

MATERIAL DATA SHEET

Recombinant Human His6 UBE2W Isoform 1

Cat. # E2-740

Ubiquitin-conjugating Enzyme E2W (UBE2W), also known as Ubiquitin-conjugating Enzyme 16 (UBC16), is a member of the Ubiquitin-conjugating (E2) enzyme family (1). It has an E2 catalytic core domain with an active site cysteine residue that is required for the formation of a thioester bond with Ubiquitin (1,2). There are two isoforms of UBE2W, isoform 1 and isoform 2, with predicted molecular weights of 18.1 kDa and 19.5 kDa, respectively. UBE2W localizes to the nucleus where it promotes the mono-ubiquitination of BRCA1 and FANCD2, both of which contribute to DNA repair pathways (1-4). Mono-ubiquitination of the CHIP Ubiquitin ligase (E3), which has been reported to enhance its E3 ligase activity, is also mediated by UBE2W (5). This protein contains an N-terminal 6-His tag.

Product Information

Quantity:	50 µg 100 µg
MW:	18 kDa
Source:	<i>E. coli</i> -derived human UBE2W protein Contains an N-terminal 6-His tag Accession # Q96B02-1
Stock:	X mg/ml (X µM) in 50 mM MOPS pH 6.5, 150 mM NaCl and 2 mM TCEP
Purity:	>90%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain at 5 µg per lane.

Use & Storage

Use: Recombinant Human His6-UBE2W-1 is a member of the Ubiquitin-conjugating (E2) enzyme family that receives Ubiquitin from a Ubiquitin-activating (E1) enzyme and subsequently interacts with a Ubiquitin ligase (E3) to conjugate Ubiquitin to substrate proteins. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human His6-UBE2W-1 concentration of 0.1-1 μ M.

Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -70 °C as supplied.
- 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Yin, G. *et al.* (2006) *Front. Biosci.* **11**:1500.
2. Alpi, A.F. *et al.* (2008) *Mol. Cell* **32**:767.
3. Christensen, D.E. *et al.* (2007) *Nat. Struct. Mol. Biol.* **14**:941.
4. Zhang, Y. *et al.* (2011) *Mol. Cells* **31**:113.
5. Scaglione, K.M. *et al.* (2011) *Mol. Cell* **43**:599.

For research use only. Not for use in humans.