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MATERIAL DATA SHEET

Recombinant Human His6 UbcH10/UBE2C
Cat. # E2-650

Ubiquitin-conjugating Enzyme H10 (UbcH10), also known as Ubiquitin-conjugating Enzyme E2C (UBE2C), is a 179 amino acid (aa) member of the yeast Ubc4/5 family of Ubiquitin-conjugating (E2) enzymes and has a predicted molecular weight of 20 kDa. Human UbcH10/UBE2C shares 96% aa sequence identity with mouse and rat UBE2C. UbcH10/UBE2C is an essential mediator of mitotic destruction events and cell cycle progression (1,2). UbcH10/UBE2C recognizes TEK sequences in target proteins such as Cyclins A and B, mediates Lys11-linked ubiquitination, and promotes target protein degradation in conjunction with APC/C, a Ubiquitin ligase (E3) (3). The catalytic activity of UbcH10/UBE2C is regulated by a conserved N-terminal extension, which mediates E2-E3 interaction (4). UbcH10/UBE2C is overexpressed in a variety of human cancers, and alternate splice isoforms may contribute to uncontrolled cell proliferation and tumor progression (5-8).

Product Information	
Quantity:	50 µg | 100 µg
MW:	21 kDa
Source:	*E. coli*-derived Contains an N-terminal Met and 7-His tag Accession # O00762
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 200 mM NaCl, 10% Glycerol (v/v), 1 mM TCEP
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use: Recombinant Human His6-UbcH10/UBE2C 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-UbcH10/UBE2C concentration of 0.1-1 µM.

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. Ye, Y. & M. Rape (2009) Nat. Rev. Mol. Cell Biol. **10**:755.
2. Lin, Y. *et al.* (2002) J. Biol. Chem. **277**:21913.
3. Dimova, N.V. *et al.* (2012) Nat. Cell Biol. **14**:168.
4. Summers, M.K. *et al.* (2008) Mol. Cell **31**:544.
5. Okamoto, Y. *et al.* (2003) Cancer Res. **63**:4167.
6. van Ree, J.H. *et al.* (2010) J. Cell Biol. **188**:83.
7. Jiang, L. *et al.* (2008) Brain Res. **1201**:161.
8. Hao, Z. *et al.* (2012) Tumor Biol. **33**:723.

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