
MATERIAL DATA SHEET

Recombinant Human His6 UbcH6/UBE2E1**Cat. # E2-630**

Ubiquitin-conjugating Enzyme H6 (UbcH6), also known as Ubiquitin-conjugating Enzyme E2E 1 (UBE2E1), is a ubiquitously expressed protein with a predicted molecular weight of 21 kDa. Human UbcH6/UBE2E1 shares 99% and 100% amino acid sequence identity with mouse and rat UBE2E1, respectively. UbcH6/UBE2E1 mediates the selective degradation of short-lived and abnormal proteins (1). UbcH6/UBE2E1 catalytic activity is modulated following the addition of the Ubiquitin-like protein ISG15 to Lys136 (2). In the nucleus, the N-terminal fragment of UbcH6/UBE2E1 interacts with the Ubiquitin ligase (E3) TRIM21 to mediate substrate ubiquitination (3,4). UbcH6/UBE2E1 also interacts with the viral E3, ICP0, during HSV-1 infection (5). In addition, UbcH6/UBE2E1-dependent protein ubiquitination is implicated in polyglutamine tract disorders such as ataxia (6,7).

Product Information

Quantity:	50 µg 100 µg
MW:	23 kDa
Source:	<i>E. coli</i> -derived Contains an N-terminal Gly-Ser-Ser and 6-His tag Accession # P51965
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 7.5, 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-UbcH6/UBE2E1 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-UbcH6/UBE2E1 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:

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5. Vanni, E. *et al.* (2012) *J. Virol.* **86**:6323.
6. Hong, S. *et al.* (2008) *Biochem. Biophys. Res. Commun.* **372**:256.
7. Lee, S. *et al.* (2008) *Biochem. Biophys. Res. Commun.* **372**:735.

Additional Sources

1. Ito K., *et al.* (2001) *Eur J. Biochem.* **268**: 2725-2732
2. Nuber U., *et al.* (1996) *J. Biol. Chem.* **271**: 2795-800
3. Plafker S.M., *et al.* (2004) *J. Cell Biol.* **167**: 649-659
4. Rajendra R., *et al.* (2004) *J. Biol. Chem.* **279**: 36440-36444
5. Vichi A., *et al.* (2005) *Proc. Natl. Acad. Sci.* **102**: 1945-1950
6. Wang Z., *et al.* (2005) *J. Virol.* **79**: 8764-8772

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