

MATERIAL DATA SHEET**UbcH5c/UBE2D3, human recombinant****Cat. # E2-627**

Ubiquitin-conjugating Enzyme H5c (UbcH5c), also known as Ubiquitin-conjugating Enzyme E2D 3 (UBE2D3), is a member of the yeast Ubc4/5 family of Ubiquitin-conjugating (E2) enzymes. Human UBE2D3 has a predicted molecular weight of 17 kDa and shares 88% and 89% amino acid sequence identity with the related family members, UbcH5a and UbcH5b, respectively. In combination with Ubiquitin ligases (E3s) such as CHIP, UBE2D3 mediates the ubiquitination and subsequent degradation of several regulatory proteins. For instance, UBE2D3 is involved in the poly-Ubiquitination and proteasome-mediated degradation of the Nuclear Factor kappaB (NF- κ B) inhibitor, I κ B- α , and is implicated in NF- κ B-dependent inflammation. UBE2D3 also mediates the ubiquitination of Histone H2A and PCNA, suggesting that it functions during transcriptional regulation, DNA replication, and DNA damage responses.

Product Information

Quantity:	100 μ g
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH 8.0, 200 mM NaCl, 10% (v/v) Glycerol, 1 mM TCEP
MW:	17 kDa
Purity:	> 98% by SDS-PAGE under reducing conditions and visualized with Colloidal Coomassie Blue stain.

Use & Storage

Use:	Typical enzyme concentration to support conjugation <i>in vitro</i> is 100 nM-1 μ M depending on conditions.
Storage:	Store at -80 $^{\circ}$ C. Avoid multiple freeze-thaw cycles.

Literature

References:	Page, R.C. <i>et al.</i> (2012) <u>Biochemistry</u> 51 : 4175. Gonen, H. <i>et al.</i> (1999) <u>J. Biol. Chem.</u> 274 : 14823. Shembade, N. <i>et al.</i> (2010) <u>Science</u> 327 : 1135. Xia, Z.P. <i>et al.</i> (2009) <u>Nature</u> 461 : 114. Zhang, S. <i>et al.</i> (2008) <u>Cell Cycle</u> 7 : 3399.
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