

MATERIAL DATA SHEET**His₆-Use1/UBE2Z, human recombinant**
Cat. # E2-677

Use1 is a recently identified E2 conjugating enzyme which is specifically charged with ubiquitin by an alternate E1 activating enzyme Uba6 (**E-307**). Uba6 has a distinct preference and specificity for Use1 based on the regions specific to the C-terminal ubiquitin-fold domain. Use1 is not active with the canonical ubiquitin E1 (UBE1, **E-305**). After activating ubiquitin, Uba6 transfers ubiquitin to Use1 leading to the formation of a thioester linkage with its catalytic site cysteine (Cys¹⁸⁸). The ubiquitin can then be conjugated to substrate proteins via specific E3 ligase enzymes. This protein contains an N-terminal His₆ tag.

Product Information

Quantity:	X µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 50 mM NaCl, 10% glycerol, 1 mM DTT. Actual concentration varies with lot #.
MW:	42.6 kD
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical enzyme concentration to support conjugation <i>in vitro</i> is 100nM-1 µM depending on conditions.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Barrios-Rodiles M., <i>et al.</i> , (2005) <u>Science</u> 307 :1621-1625. Gu X., <i>et al.</i> , (2007) <u>Mol. Biol. Rep.</u> 34:183-188. Jin J., <i>et al.</i> , (2007) <u>Nature</u> 447 : 1135-1138. Park K.M., <i>et al.</i> , (2007) <u>Mol.Cells</u> 23 :170-174.
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