

### Background

Ubiquitin-conjugating enzyme E2 E3 is a protein encoded by the UBE2E3 gene in humans. The UBE2E3 protein can form a thioester bond with ubiquitin in an E1-dependent manner and subsequently mediates the transfer of ubiquitin from a ubiquitin-activating enzyme (E1) to either a substrate protein or an E3 ligase. UBE2E3 shows a preference for generating monoubiquitylated products due to specific interactions involving lysine 48 (K48) on ubiquitin and backside residues of the E2 enzyme. Studies have shown that UBE2E3 regulates the activity of Nrf2, a transcription factor that induces the expression of antioxidant genes to neutralize reactive oxygen species and restore redox homeostasis.

### Alternate Names

UbcH9, UbcM2, UBCE4

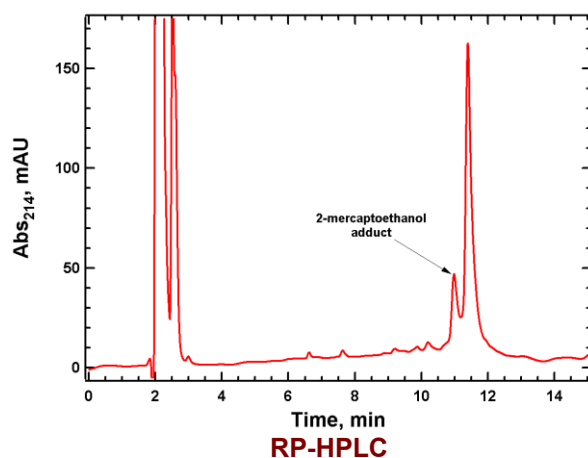
### Application(s)

Ubiquitin ligation reactions

### Product Specifications

Tag	None
Purity	≥ 95% by RP-HPLC
Molecular Weight	22,913 Da by MS (calculated 22,912.7)
Quantity	20 µl or 75 µl of a 40 µM solution (0.8 and 3 nmoles, respectively)
Species	Human, recombinant; Accession No. Q969T4
Expression System	<i>E. Coli</i>
Physical State	Liquid
Buffer	20 mM Tris, pH 7.4; 150 mM NaCl; 10 mM DTT; 10% glycerol
Solubility	> 3mg/mL
Stability & Storage	1 year at -80° C. Avoid repeated freeze/thaw cycles

### Product QC



### References

1. Stewart., et al., Cell Res. 2016; 26, 423–440.
2. Nguyen L., et al., Biochemistry. 2014;53(24):4004-14.

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