

MATERIAL DATA SHEET

Ubiquitin E1 Enzyme (UBE1), *human recombinant*

Cat. # UBE-024

Product specification: 25ug

General Information

This enzyme is responsible for the first step in ubiquitin-protein isopeptide bond formation, by forming a high-energy thioester bond with ubiquitin. The ubiquitin is activated by first adenylating with ATP its C-terminal glycine residue (Gly76) and thereafter linking this residue to the side chains of a cysteine residue in UBE1, yielding an ubiquitin-UBE1 thiolester and free AMP and PPI. The activated ubiquitin is then transferred to a lysine of the targeted protein via the E2-E3 conjugation cascade. UBE1 is a critical component for the initiation of any *in vitro* conjugation reactions. Protein has tag at the N-terminus.

Concentration: X mg/ml (X μ M) in 50 mM HEPES pH 7.0, 150 mM NaCl, 2 mM DTT

Actual concentration will vary with specific Lot #.

50 mM HEPES pH 8.0, 50mM NaCl

Quality Control

Purity: >95% as determined by SDS-PAGE

USE: We recommend an initial Recombinant Human Ubiquitin Activating Enzyme (UBE1) concentration of 50-200 nM.

Storage: Store at -80 °C, avoid multiple freeze/thaw cycles