Lot # XXXX

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MATERIAL DATA SHEET

GST-Ubiquitin E1 Enzyme (UBE1), *human recombinant*
Cat. # E-306

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.

Product Information

Quantity:	50 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0. Actual concentration varies with lot number
Purity:	> 95% by SDS-PAGE
MW:	136 kDa

Use & Storage

Use:	Typical enzyme concentration to support conjugation *in vitro* is 50-200 nM depending on conditions.
Storage:	Store at –80°C. Avoid multiple freeze/thaw cycles.

Literature

References:

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