



# Recombinant Protein Technical Manual

## Recombinant Human UBE2M/UBC12 Protein

RPES3853

### Product Data:

**Product SKU:** RPES3853

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P61081

### Protein Information:

**Molecular Mass:** 20.9 kDa

**AP Molecular Mass:** 25 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 50mM HEPES, pH 7.5, 2mM DTT, 150mM NaCl, 10% Glycerol.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** NEDD8-conjugating enzyme Ubc12; NEDD8 carrier protein; NEDD8 protein ligase; Ubiquitin-conjugating enzyme E2 M; UBC12; UBE2M;

## Immunogen Information:

**Sequence:** Met1-Lys183

## Background:

UBE2M is a member of the E2 ubiquitin-conjugating enzyme family. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. This protein is linked with a ubiquitin-like protein, NEDD8, which can be conjugated to cellular proteins, such as Cdc53/culin. UBE2M accepts the ubiquitin-like protein NEDD8 from the UBA3-NAE1 E1 complex and catalyzes its covalent attachment to other proteins. The specific interaction with the E3 ubiquitin ligase RBX1, but not RBX2, suggests that the RBX1-UBE2M complex neddylates specific target proteins, such as CUL1, CUL2, CUL3 and CUL4. It involved in cell proliferation and is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation.