

MATERIAL DATA SHEET

Recombinant Human His6 UBE2G1

Cat. # E2-700

Ubiquitin-conjugating Enzyme E2G 1 (UBE2G1) is a 170 amino acid (aa) member of the Ubiquitin-conjugating (E2) enzyme family with a predicted molecular weight of 19.5 kDa. The human protein shares 100% aa sequence identity with the mouse and rat orthologs. UBE2G1 has an E2 catalytic core domain with an active site cysteine residue that is required for the formation of a thioester bond with Ubiquitin (1). The expression level of UBE2G1 is downregulated when miR-199a is overexpressed, suggesting that *UBE2G1* mRNA is targeted by miR-199a (2). UBE2G1 has been reported to function with the CRL4 (Cdt2) Ubiquitin ligase (E3) to promote the poly-ubiquitination and degradation of Cdt1 (3). Reduced expression of UBE2G1 in medulloblastoma tumors has also been reported, suggesting that it may act as a tumor suppressor (4). This protein contains an N-terminal 6-His tag.

Product Information

Quantity:	50 µg 100 µg
MW:	20 kDa
Source:	<i>E. coli</i> -derived Contains an N-terminal 6-His tag Accession # P62253
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 7.5, 200 mM NaCl, 10% Glycerol (v/v), 1 mM TCEP
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use:	Recombinant Human His6-UBE2G1 is a member of the Ubiquitin-conjugating (E2) enzyme family that receives Ubiquitin from a Ubiquitin-activating (E1) enzyme and subsequently interacts with a Ubiquitin ligase (E3) to conjugate Ubiquitin to substrate proteins. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human His6-UBE2G1 concentration of 0.1-1 µM.
Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 12 months from date of receipt, -70 °C as supplied.• 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Hershko, A. *et al.* (1983) J. Biol. Chem. **258**:8206.
2. Haghikia, A. *et al.* (2011) Eur. Heart J. **32**:1287.
3. Shibata, E. *et al.* (2011) Mol. Cell. Biol. **31**:3136.
4. Cvekl, A. Jr. *et al.* (2004) Eur. J. Cancer **40**:2525.

For research use only. Not for use in humans.