

## Recombinant UBE2G1 protein

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**Catalog No:** 81485, 81585

**Expressed In:** *E. coli*

**Quantity:** 100, 1000 µg

**Source:** Human

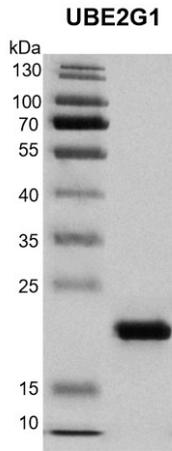
**Buffer Contents:** Recombinant UBE2G1 protein is supplied in 25 mM Tris 8.0, 300mM NaCl, 20% glycerol, 0.5 mM TCEP.

**Background: UBE2G1 (Ubiquitin-conjugating enzyme E2 G1)** also known as E217K, UBC7, UBE2G. **UBE2G1** is a member of the E2 ubiquitin-conjugating enzyme family which is required for post-replicative DNA damage repair and plays an important role in various cellular processes. **UBE2G1** can accept ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-48'-, as well as 'Lys-63'-linked polyubiquitination. May be involved in degradation of muscle-specific proteins. Mediates polyubiquitination of CYP3A4.

**Protein Details:** Recombinant UBE2G1 protein that includes full length of human UBE2G1 protein (accession number NP\_003333.1) was expressed in *E. coli* and contains an N-terminal His tag with a molecular weight of 21.67 kDa. The purity of the protein is ≥ 95% by SDS-PAGE.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data this product is shown.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

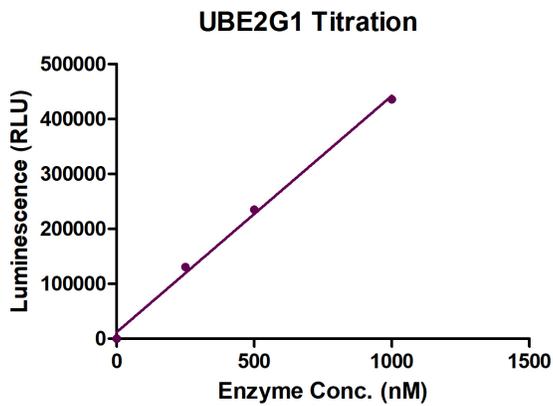


**Recombinant UBE2G1 protein**

12.5% SDS-PAGE Coomassie staining

MW: 21.67 kDa kDa

Purity:  $\geq 95\%$



**AMP-Glo assay for UBE2G1 activity**

7.9  $\mu$ M ubiquitin, 63 nM UBA1 and 25  $\mu$ M ATP were incubated with different concentrations of UBE2G1 in 10  $\mu$ l reaction system containing 40 mM Tris-HCl pH 7.4, 20 mM MgCl<sub>2</sub>, 0.5 mM DTT, 0.1 mg/ml BSA at 3°C for 1 hour. 10  $\mu$ l of AMP-Glo Reagent I was added to the reaction and incubated for 1 hour at room temperature. Then 20  $\mu$ l of AMP-Glo Detection Solution was added and luminescence was read after another 30 min incubation.