

UBE2D1

Cat. No. SBB-CE0021
Lot. No. 163060021



South Bay Bio

UBE2D1

UBE2D1 is an E2 ubiquitin conjugating enzyme. An E1 activating enzyme is required to attach ubiquitin to UBE2D1 via an active site cysteine. The mechanism of ubiquitin transfer involves the breaking of a E1-Ub thioester linkage, followed by a reformation of a UBE2D1-Ub thioester. UBE2D1 is capable of associating with numerous known E3 ligases which target abnormal proteins for proteasomal degradation through polyubiquitination. UBE2D1 is also known to interact with Parkin, and to be involved in PINK1 mediated mitophagy. This UBE2D1 is recombinantly expressed in *E.coli*.

Product Information

Quantity: 100µg **Molecular Weight:** 17 kDa

Concentration: 50µM, 0.85 mg/mL

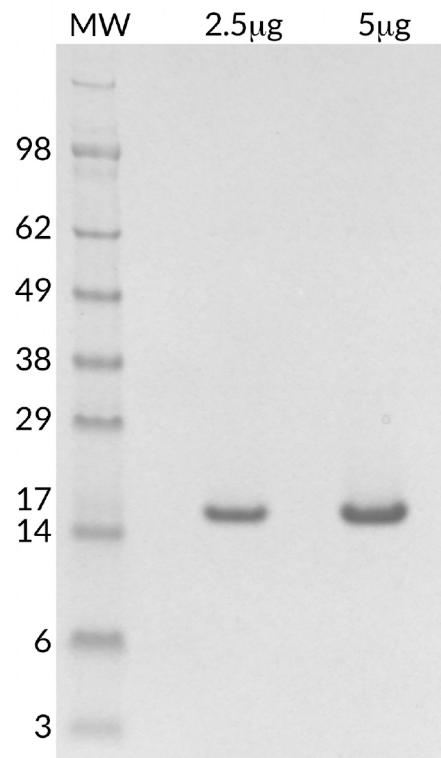
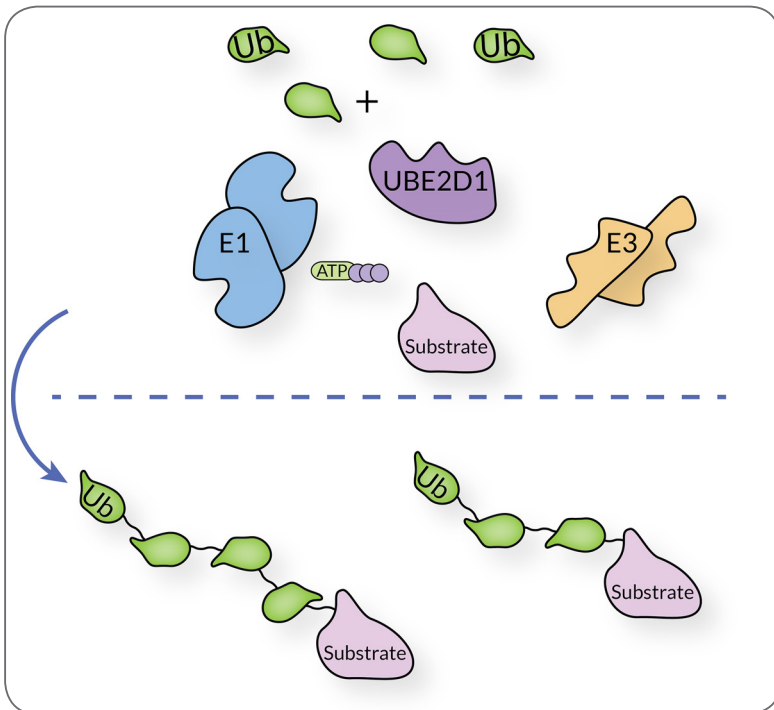
Purity: >95% by SDS-PAGE

Storage Buffer: 50 mM HEPES pH 7.5, 150mM NaCl, 10% glycerol, 2mM TCEP

Storage: -80C, Avoid multiple freeze / thaw

Usage: Working concentrations of this enzyme range from 1 to 5µM.

Quality Control and Performance Data



UBE2D1 SDS-PAGE. From left to right, increasing amounts of UBE2D1 loaded onto a 4-20% SDS-PAGE gel, stained with coomassie brilliant blue. Purity is > 95%.

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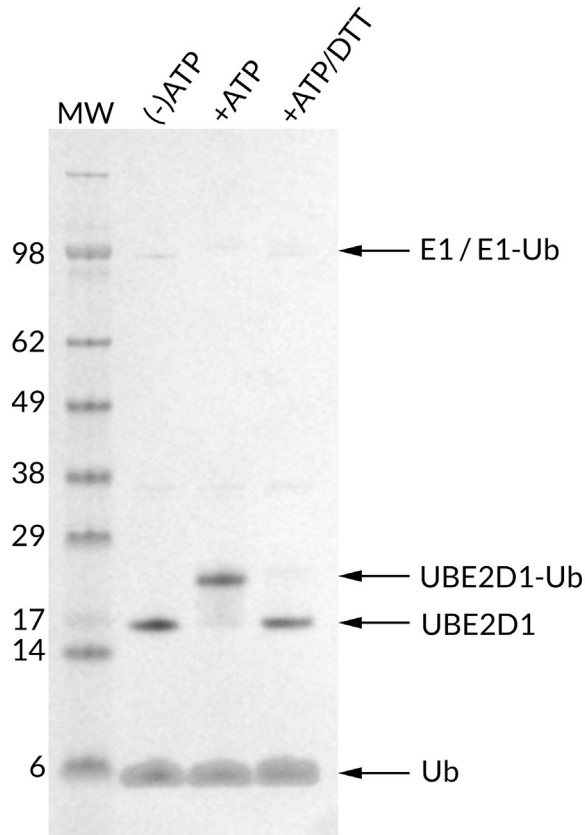
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Thioester Activity Assay. UBE2D1 forms a thioester with Ub in an ATP dependent manner, and the bond can be reduced with addition of excess DTT. The UBE2D1 is active.

References

- 1) Van Wijk, Sjoerd JL, and HT Marc Timmers. "The family of ubiquitin-conjugating enzymes (E2s): deciding between life and death of proteins." *The FASEB Journal* 24.4 (2010): 981-993.
- 2) Buetow, Lori, and Danny T. Huang. "Structural in sights into the catalysis and regulation of E3 ubiquitin ligases." *Nature Reviews Molecular Cell Biology* (2016).

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