His_6- Ubiquitin Activating Enzyme

Cat. No. SBB-CE0058
Lot. No. 180770058

South Bay Bío

UBA1

UBA1, the canonical Ubiquitin E1 activating enzyme is a 118kDa protein, which forms a homodimer in its active state. It activates Ubiquitin in an ATP-dependent mechanism where ATP is hydrolyzed to AMP and PPi, a Ubiquitin C-terminal adenylate intermediate is formed, then transferred to the E1's active site cysteine through a thioester bond. This thioester is then transferable to an E2 conjugating enzyme's active site cysteine. Working concentrations of this enzyme range from 10 to 100nM. This enzyme is produced recombinantly from insect cells and is His_6-tagged on its N-terminus.

Product Information

Quantity: 50µg **Molecular Weight:** 120 kDa

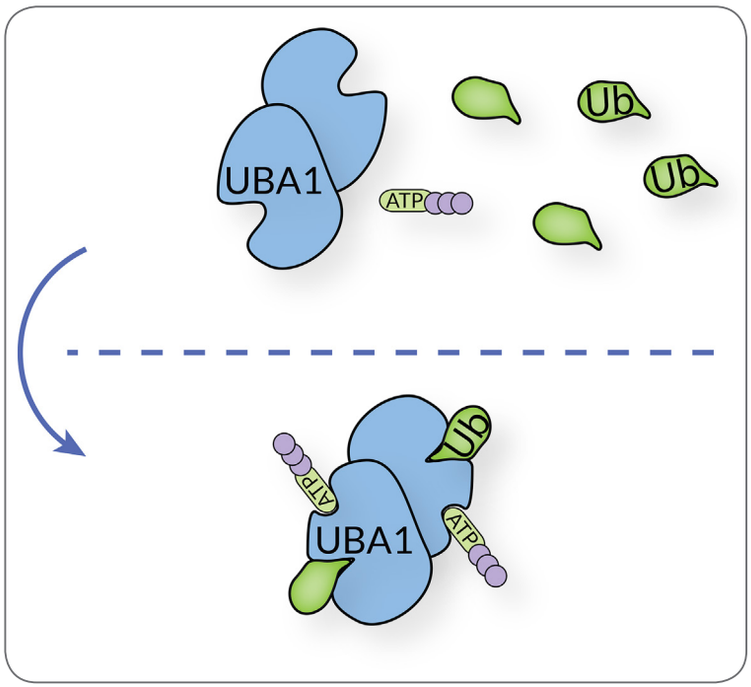
Concentration: 5 µM, 0.6 mg/mL

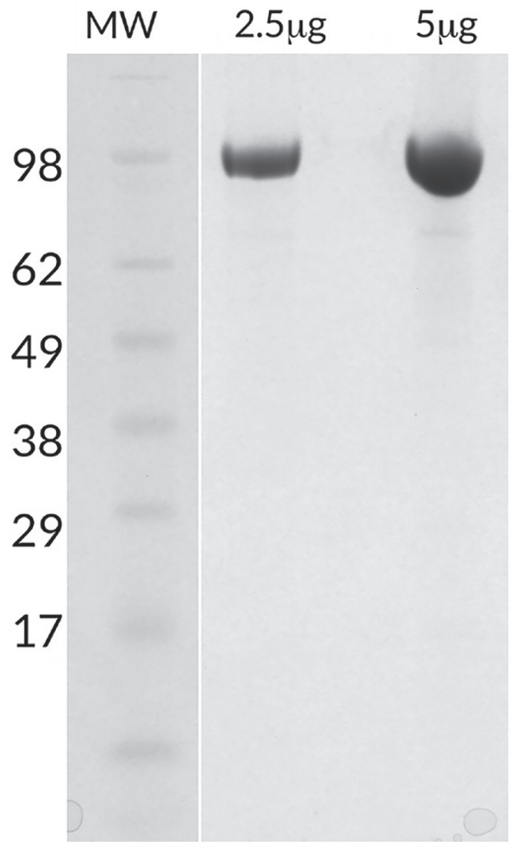
Purity: >95% by SDS-PAGE

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

Storage: -80C, Avoid multiple freeze / thaw

Quality Control and Performance Data





UBA1 SDS-PAGE. From left to right, increasing amounts of UBA1 loaded onto a 4-20% SDS-PAGE gel, stained with Coomassie brillant blue. Purity is > 95%.

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References

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4) Olsen, Shaun K., and Christopher D. Lima. "Structure of a ubiquitin E1-E2 complex: insights to E1-E2 thioester transfer." Molecular cell 49.5 (2013): 884-896.

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