
MATERIAL DATA SHEET

GST-NEDD8 E1 (APPBP1/UBA3), human recombinant
Cat. # E-312 (GST-tagged)

The ATP-coupled activation of NEDD8 that is required for subsequent charging of the NEDD8-specific E2 UbcH12 is catalyzed by heterodimeric APPBP1-Uba3 in humans. The enzyme catalyzes the activation of the C-terminal carboxyl group of NEDD8 by forming a high-energy thioester bond in an ATP-dependent manner. Uba3 shows 43% homology to the C-terminal half of the ubiquitin activating E1 enzyme Uba1. The Uba3-catalyzed activation of NEDD8 exhibits an absolute requirement for APPBP1 which has high homology to the N-terminal half of Uba1.

Product Information

Quantity:	50 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 200 mM NaCl. Actual concentration will vary with specific Lot #.
Purity:	> 95% by SDS-PAGE
MW:	135 kDa

Use & Storage

Use:	Typical enzyme concentration to support conjugation <i>in vitro</i> is 50-200 nM depending on conditions.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Lake M.W., <i>et al.</i> (2001) <u>Nature</u> . 414 :325-328 Hemelaar J., <i>et al.</i> (2004) <u>Mol. Cell. Biol.</u> 24 :84-95 Walden H., <i>et al.</i> (2003) <u>Nature</u> . 422 :330-334
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