

MATERIAL DATA SHEET**His₆-Apg4b/ATG4B, human recombinant**
Cat. # E-400

The Apg4b is a cysteine protease and a member of the autophagin protein family. This enzyme cleaves the C-terminal sequences of the precursor forms of Apg8 proteins (including GABARAP, GATE-16 and MAP-LC3), and regulates the lipidation and delipidation processes of these proteins. This specific cleavage reveals the conserved C-terminal glycine present in mature and active forms of the Apg8 proteins that are conjugated to phosphatidylethanolamine (PE) during autophagy.

Product Information

Quantity:	25 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 100 mM NaCl, 1 mM EDTA, 2 mM DTT. Actual protein concentration will vary with specific Lot #.
MW:	46.5 kDa
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical enzyme concentration to support hydrolysis of substrates <i>in vitro</i> is 10-100 nM depending on conditions. Pre-incubation (15 min) with 10 mM DTT is recommended to achieve maximum activity.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Abeliovich H. and Klionsky D.J. (2001) <u>Euk. Cell.</u> 65 : 463-479 Ichimura Y., <i>et al.</i> (2000) <u>Nature.</u> 408 : 488-492 Kabeya Y., <i>et al.</i> (2004) <u>J. Cell. Sci.</u> 117 : 2805-2812 Marino G., <i>et al.</i> (2003) <u>J. Biol. Chem.</u> 278 : 3671-3678 Reggiori F. and Klionsky D.J. (2002) <u>Euk. Cell.</u> 1 :11-21 Sugawara K., <i>et al.</i> (2005) <u>J. Biol. Chem.</u> 280 : 40058-40065 Tanida I., <i>et al.</i> (2004) <u>J. Biol. Chem.</u> 279 : 36268-36276 Tanida I., <i>et al.</i> (2004) <u>J. Biol. Chem.</u> 279 : 47704-47710
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