

## MATERIAL DATA SHEET

### HA-Apg8p1(GABARAP) Vinyl Sulfone, *human recombinant* Cat. # UL-441

This N-terminal HA-tagged protein is a potent, irreversible and specific inhibitor of Apg8-specific isopeptidases (such as Apg84B, Cat # E-400). Apg84B activities include the processing of Apg8 precursor proteins and the removal of Apg8 proteins that are conjugated to phosphatidylethanolamine during autophagy. These processes can be inhibited by this vinyl sulfone derivative which reacts with the Apg84B active site cysteine. The HA peptide sequence (YPYDVPDYA) is derived from the influenza hemagglutinin protein. This epitope allows for the sensitive identification or purification of such deconjugating activities since it is specifically recognized by anti-HA antibodies and/or anti-HA-agarose.

#### Product Information

<b>Quantity:</b>	25 µg
<b>Stock:</b>	X mg/ml (X µM) in 50 mM Hepes pH 7.5, 100 mM NaCl, 10 % glycerol. Concentration varies with Lot #.
<b>MW:</b>	14 kDa
<b>Purity:</b>	> 90%

#### Use & Storage

<b>Use:</b>	Add directly to <i>in vitro</i> assay from the stock solution. Depending on conditions and detection method, typical concentrations to fully inhibit Apg deconjugating enzymes <i>in vitro</i> are 1-5 µM.
<b>Storage:</b>	Store at -80°C. Avoid multiple freeze/thaw cycles.

#### Literature

<b>References:</b>	Borodovsky A, <i>et al.</i> (2002) <u>Chem. Biol.</u> <b>9</b> :1149-1159 Hemelaar J., <i>et al.</i> (2003) <u>J Biol. Chem.</u> <b>278</b> :51841-51850 Hemelaar J., <i>et al.</i> (2004) <u>Mol. Cell. Biol.</u> <b>24</b> :84-95 Kessler B.M. (2006) <u>Exp. Rev. Proteomics.</u> <b>3</b> :213-221 Kumanomidou T., <i>et al.</i> (2006) <u>J. Mol. Biol.</u> <b>355</b> :612-618 Love K.R, <i>et al.</i> (2007) <u>Nat. Chem. Biol.</u> <b>3</b> :697-705 Wilkinson K.D. <i>et al.</i> (2005) <u>Meth. Enz.</u> <b>399</b> :37-51
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