

MATERIAL DATA SHEET

His₆-GABARAP/Apg8p1, human recombinant Cat. # UL-410

There are at least three groups of mammalian Apg8 proteins which are homologs of the yeast Atg8 protein, including GABARAP (**GABA_A Receptor Associated Protein**). The mammalian Apg8 proteins are ubiquitin-like modifiers that have divergent functions in human, and are essential in autophagic conjugation systems. This modifier protein has a conserved C-terminal glycine residue that becomes covalently attached to phosphatidylethanolamine (PE) after it is activated by the Apg7p (E1) and Apg3p (E2) enzymes. GABARAP is associated with intracellular membranes and co-localizes with microtubules. GABARAP may play a role in intracellular transport and clustering of neurotransmitters (like GABA_A receptors) by mediating their interaction with the cytoskeleton. Accession # NP_009209.

Product Information

Quantity:	500 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 100 mM NaCl, 10% glycerol. Actual protein concentration will vary with specific Lot #.
MW:	16 kDa
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical concentration to support conjugation <i>in vitro</i> is 10-50 µM depending on conditions.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Bavro V.N., <i>et al.</i> (2002) <u>EMBO. Rep.</u> 3 : 183-189 Kouno T., <i>et al.</i> (2002) <u>J. Biomol. NMR.</u> 22 : 97-98 Knight D., <i>et al.</i> (2002) <u>J.Biol.Chem.</u> 277 : 5556-5561 Nymann-Anderson J., <i>et al.</i> (2002) <u>Neuropharm.</u> 43 : 476-481 Tanida I., <i>et al.</i> (2003) <u>Biochem. Biophys. Res. Comm.</u> 300 : 637-644 Stangler T., <i>et al.</i> (2002) <u>J.Biol.Chem.</u> 277 : 15563-13366 Wang H., <i>et al.</i> (1999) <u>Nature.</u> 397 : 69-72 Xin Y., <i>et al.</i> (2001) <u>Genomics.</u> 74 : 408-413
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