Active Recombinant Human MAP1LC3B, His-tagged

Cat. No. MAP1LC3B-192H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MAP1LC3B (amino acid residues 1-120), fused with N-terminal His, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	1-120 a.a.
Description	Three classes of enzymes are involved in autophagy; E1-like activating enzymes (E1s), E2-like conjugating enzymes (E2s) and ubiquitin-like proteins (ubls). Microtubule Associated Protein 1, Light Chain 3 beta, MAP1LC3b or LC3b is a member of the Ubl family and cloning of the human gene was first described by He et al. (2003). The C-terminal of LC3b is cleaved by ATG4B C-terminal to Gly120 in vitro and this has been shown to be required for the formation of intermediates with the ubiquitin-like activating enzyme ATG7 (Tanida et al. 2004).
Form	50 mM HEPES pH 7.5, 150 mM sodium chloride, 2 mM dithiothreitol, 10% glycerol
Bio-activity	E1 Thioester LC3b Loading Assay: The activity of LC3b was validated by loading LC3b onto the active cysteine of His-ATG7. Incubation of the His-ATG7 enzyme in the presence of LC3b and ATP at 30?C was compared at two time points, T0 and T10 minutes. Sensitivity of the LC3b/His-ATG7 thioester bond to the reducing agent DTT was confirmed.

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Molecular Mass	~16.93 kDa
Purity	>98% by SDS-PAGE
Storage	12 months at -70°C. Avoid multiple freeze/thaw cycles.
Concentration	1 mg/ml

GENE INFORMATION

Gene Name	MAP1LC3B microtubule-associated protein 1 light chain 3 beta [Homo sapiens]
Official Symbol	MAP1LC3B
Synonyms	MAP1LC3B; microtubule-associated protein 1 light chain 3 beta; microtubule-associated proteins 1A/1B light chain 3B; ATG8F; MAP1A/MAP1B LC3 B; MAP1A/MAP1B light chain 3 B; MAP1 light chain 3-like protein 2; autophagy-related ubiquitin-like modifier LC3 B; LC3B; MAP1LC3B-a; MAP1A/1BLC3;
Gene ID	81631
mRNA Refseq	NM_022818
Protein Refseq	NP_073729
MIM	609604
UniProt ID	Q9GZQ8
Chromosome Location	16q24.2

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Pathway	Senescence and Autophagy, organism-specific biosystem;
Function	protein binding;

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