Recombinant MLP3C protein (His tag)

Catalog Number	545859
Synonyms	Autophagy-related protein LC3 C; Autophagy-related ubiquitin-like modifier LC3 C; MAP1 light chain 3-like protein 3; Microtubule-associated proteins 1A/1B light chain 3C; MAP1A/MAP1B LC3 C; MAP1A/MAP1B light chain 3 C
Species	Human
Expression System	E. coli
Accession	Q9BXW4
Molecular Weight	Predictes a molecular mass of 16.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-126
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-126 aa (Q9BXW4) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human MAP1LC3C (Microtubule-associated protein 1 light chain 3 gamma) fragment (amino acids 1-126) is a high-purity protein designed for autophagy research. This fragment represents a stable, soluble unit ideal for structural studies, biochemical assays, and investigating its role in selective autophagy pathways. Microtubule-associated protein 1 light chain 3 gamma (MAP1LC3C) is a ubiquitin-like modifier essential for antibacterial autophagy (xenophagy), where it selectively binds CALCOCO2 to recruit ATG8 family members to invading pathogens like Salmonella typhimurium. It also contributes to aggrephagy, the degradation of ubiquitinated protein aggregates. The protein localizes to autophagosome membranes (as lipid-anchored LC3-II form), endomembrane systems, and the cytoskeleton, highlighting its central role in macroautophagic processes. This recombinant fragment enables focused investigation of these critical cellular quality control mechanisms.