Recombinant LIPT2 protein (His tag)

Catalog Number	541679
Synonyms	Lipoate-protein ligase B; Lipoyl/octanoyl transferase; Lipoyltransferase 2; Octanoyl-[acyl-carrier-protein]-protein N-octanoyltransferase
Species	Human
Expression System	E. coli
Accession	A6NK58
Molecular Weight	Predictes a molecular mass of 23.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	32-231
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 32-231 aa (A6NK58) 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	This recombinant protein product features a 200-amino acid fragment (residues 32-231) of the human Octanoyl-[acyl-carrier-protein]:protein N-octanoyltransferase LIPT2. It encompasses the complete BPL/LPL catalytic domain, providing researchers with a specialized tool for investigating lipoate metabolism and octanoyl transfer mechanisms in mitochondrial systems. The full-length LIPT2 protein, encoded by the LIPT2 gene in Homo sapiens, functions as a mitochondrial octanoyltransferase (EC 2.3.1.181) that catalyzes the transfer of endogenously produced octanoic acid from octanoyl-acyl-carrier-protein to lipoyl domains of lipoate-dependent enzymes, including the glycine cleavage system protein H. While lipoyl-ACP can serve as an alternative substrate, octanoyl-ACP is considered the physiological substrate. Located exclusively in the mitochondrion, LIPT2 plays a critical role in mitochondrial metabolism by facilitating protein lipoylation, an essential post-translational modification for enzyme function in key metabolic pathways.