Recombinant ODP2 protein (His tag)

Catalog Number	546744
Synonyms	70 kDa mitochondrial autoantigen of primary biliary cirrhosis; PBC; Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex; M2 antigen complex 70 kDa subunit; Pyruvate dehydrogenase complex component E2; PDC-E2; PDCE2
Species	Human
Expression System	E. coli
Accession	P10515
Molecular Weight	Predictes a molecular mass of 33.10 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	355-647
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 355-647 aa (P10515) 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 DLAT Protein Fragment (aa 355-647) is a high-purity, functional fragment of the dihydrolipoyllysine-residue acetyltransferase component of the pyruvate dehydrogenase complex. This fragment encompasses the critical Peripheral Subunit-Binding Domain (PSBD), making it an ideal tool for investigating domain-specific interactions and mechanisms in mitochondrial energy metabolism. The full-length DLAT protein functions as a key component of the mitochondrial pyruvate dehydrogenase complex (PDC), where it catalyzes the transfer of acetyl groups to lipoic acid moieties. This reaction is essential for converting pyruvate to acetyl-CoA, thereby bridging glycolysis in the cytoplasm with the tricarboxylic acid (TCA) cycle in the mitochondria. Located in the mitochondrial matrix, DLAT plays a central role in cellular energy production and metabolic regulation. The provided fragment (aa 355-647) includes the PSBD domain, enabling focused studies on subunit interactions and the molecular basis of PDC function.