Recombinant ODB2 protein (His tag)

Catalog Number	546756
Synonyms	52 kDa mitochondrial autoantigen of primary biliary cirrhosis; Branched chain 2-oxo-acid dehydrogenase complex component E2; BCOADC-E2; Branched-chain alpha-keto acid dehydrogenase complex component E2; BCKAD-E2; BCKADE2; BCKDH-E2; Dihydrolipoamide acetyltransferase component of branched-chain alpha-keto acid dehydrogenase complex; Dihydrolipoamide branched chain transacylase; Dihydrolipoyllysine-residue (2-methylpropanoyl)transferase
Species	Human
Expression System	E. coli
Accession	P11182
Molecular Weight	Predictes a molecular mass of 10.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	63-140
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 63-140 aa (P11182) 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 product is a recombinant fragment of the human Lipoamide acyltransferase component of the branched-chain alpha-keto acid dehydrogenase complex (DBT), encompassing amino acids 63-140. This fragment is engineered to include the complete Lipoyl-binding domain, making it an ideal tool for investigating domain-specific interactions and functions in mitochondrial metabolism and related research. The full-length DBT protein, also known as the E2 component of the branched-chain alpha-keto acid dehydrogenase complex, is a mitochondrial matrix enzyme essential for amino acid catabolism. It catalyzes the transfer of acyl groups to coenzyme A during the oxidative decarboxylation of branched-chain alpha-keto acids, a critical step in energy production. This enzyme is part of a multi-component complex and is notably recognized as the 52 kDa mitochondrial autoantigen in primary biliary cirrhosis, highlighting its clinical relevance in autoimmune disease research.