Recombinant ODPB protein (His tag)

Catalog Number	546755
Synonyms	PDHE1-B
Species	Human
Expression System	E. coli
Accession	P11177
Molecular Weight	Predictes a molecular mass of 37.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	31-359
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 31-359 aa (P11177) 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 stable and soluble fragment (residues 31-359) of the human Pyruvate dehydrogenase E1 component subunit beta, mitochondrial (PDHE1-B). This fragment is designed for structural and biochemical studies, offering a functional unit that supports research into pyruvate metabolism and energy production pathways. The full-length PDHE1-B is a critical component of the pyruvate dehydrogenase complex, which catalyzes the conversion of pyruvate to acetyl-CoA and CO2, thereby bridging glycolysis with the tricarboxylic acid cycle. This reaction is essential for cellular energy metabolism, as it regulates the entry of carbon into the mitochondrial respiratory chain. The protein is localized in the mitochondrial matrix, where it functions in aerobic conditions to support ATP production. The provided fragment encompasses the key structural domain (residues 31-359), selected for its stability and solubility, enabling detailed investigation of the enzyme's mechanisms and interactions.