Recombinant MCEE protein (His tag)

Catalog Number	545743
Synonyms	DL-methylmalonyl-CoA racemase
Species	Human
Expression System	E. coli
Accession	Q96PE7
Molecular Weight	Predictes a molecular mass of 16.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	41-176
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 41-176 aa (Q96PE7) 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 Methylmalonyl-CoA Epimerase (MCEE) Fragment (residues 41-176) is a high-purity protein designed for studying propionyl-CoA metabolism. This fragment fully encompasses the functional VOC domain, making it an ideal tool for domain-specific functional assays and metabolic research. Methylmalonyl-CoA epimerase (EC 5.1.99.1), encoded by the MCEE gene, is a mitochondrial enzyme involved in propionyl-CoA metabolism. As indicated by experimental evidence (ECO:0000269|PubMed:11481338), this enzyme catalyzes the epimerization of methylmalonyl-CoA, playing a crucial role in the metabolic pathway that converts propionyl-CoA to succinyl-CoA. The protein's mitochondrial localization (ECO:0000305) underscores its importance in cellular energy metabolism and metabolic disorders.