Recombinant SCOT2 protein (His tag)

Catalog Number	549634
Synonyms	3-oxoacid CoA-transferase 2A; Testis-specific succinyl-CoA:3-oxoacid CoA-transferase; SCOT-t
Species	Human
Expression System	E. coli
Accession	Q9BYC2
Molecular Weight	Predictes a molecular mass of 53.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	40-517
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 40-517 aa (Q9BYC2) 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 OXCT2 (Succinyl-CoA:3-ketoacid coenzyme A transferase 2, mitochondrial) Fragment (aa 40-517) - a highly stable and soluble protein fragment designed for structural and biochemical studies of ketone body metabolism. Succinyl-CoA:3-ketoacid coenzyme A transferase 2 (OXCT2) is a key mitochondrial enzyme essential for ketone body catabolism. This enzyme catalyzes the transfer of the CoA moiety from succinate to acetoacetate, playing a critical role in energy metabolism through ketone body utilization. The enzyme functions via formation of an enzyme-CoA intermediate through an unstable anhydride species between carboxylate groups of the enzyme and substrate. Located specifically in the mitochondrion, OXCT2 represents a testis-specific isoform of the CoA-transferase family, making it particularly valuable for studying tissue-specific metabolic pathways.