Recombinant THIL protein (His tag)

Catalog Number	546870
Synonyms	Acetoacetyl-CoA thiolase; T2
Species	Human
Expression System	E. coli
Accession	P24752
Molecular Weight	Predictes a molecular mass of 43.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	34-427
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 34-427 aa (P24752) 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 Acetyl-CoA acetyltransferase, mitochondrial (ACAT1) fragment (residues 34-427) from Homo sapiens, produced to support research on mitochondrial beta-oxidation and ketone body metabolism. This 394-amino acid fragment is engineered for stability and solubility, ideal for structural studies and enzymatic assays. Acetyl-CoA acetyltransferase, mitochondrial (ACAT1) is a key enzyme in the mitochondrial beta-oxidation pathway, catalyzing the thiolytic cleavage of medium- to long-chain 3-oxoacyl-CoAs into acetyl-CoA and a shortened fatty acyl-CoA. It also reversibly condenses two acetyl-CoA molecules into acetoacetyl-CoA, playing a central role in ketone body metabolism. The enzyme is localized to the mitochondrion, where it contributes to fatty acid degradation and energy production. This fragment encompasses residues 34-427, representing a stable, soluble unit for biochemical and structural investigations.