Recombinant PECR protein (His tag)

Catalog Number	548159
Synonyms	TERP; 2,4-dienoyl-CoA reductase-related protein; DCR-RP; HPDHase; Short chain dehydrogenase/reductase family 29C member 1; pVI-ARL
Species	Human
Expression System	E. coli
Accession	Q9BY49
Molecular Weight	Predictes a molecular mass of 34.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	1-303
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 1-303 aa (Q9BY49) 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 1-303) of human Peroxisomal trans-2-enoyl-CoA reductase (TERP), also known as PECR. Engineered for structural and biochemical studies, this fragment retains key functional regions essential for investigating fatty acid chain elongation mechanisms. Peroxisomal trans-2-enoyl-CoA reductase (TERP), encoded by the PECR gene, plays a critical role in fatty acid metabolism by catalyzing the reduction of trans-2-enoyl-CoAs with chain lengths from 6:1 to 16:1, demonstrating peak activity with 10:1 CoA. Unlike related enzymes, it specifically lacks 2,4-dienoyl-CoA reductase activity, highlighting its specialized function in peroxisomal fatty acid elongation pathways. The protein is localized to peroxisomes, where it contributes to cellular lipid homeostasis, making it a valuable target for metabolic research.