Recombinant PPOX protein (His tag)

Catalog Number	540008
Synonyms	PPO
Species	Human
Expression System	E. coli
Accession	P50336
Molecular Weight	Predictes a molecular mass of 52.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	1-477
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 1-477 aa (P50336) 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 Protoporphyrinogen oxidase (PPO) (EC 1.3.3.4) fragment (residues 1-477) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable and soluble unit of the enzyme, which catalyzes the critical oxidation step in heme biosynthesis, making it ideal for research applications. Protoporphyrinogen oxidase (PPO) is a mitochondrial inner membrane enzyme that catalyzes the 6-electron oxidation of protoporphyrinogen-IX to protoporphyrin-IX, a key reaction in the heme biosynthesis pathway. As a peripheral membrane protein localized to the intermembrane side of the mitochondrion, PPO plays an essential role in cellular energy metabolism and oxygen transport. This enzyme's function is well-documented through multiple studies, highlighting its importance in fundamental biological processes and potential relevance to metabolic disorders.