Recombinant HEM4 protein (His tag)

Catalog Number	546747
Synonyms	UROIIIS; UROS; Hydroxymethylbilane hydrolyase [cyclizing]; Uroporphyrinogen-III cosynthase
Species	Human
Expression System	E. coli
Accession	P10746
Molecular Weight	Predictes a molecular mass of 30.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1-265
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 1-265 aa (P10746) 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 product is a high-quality recombinant fragment of Human Uroporphyrinogen-III synthase (UROIIIS), encompassing residues 1-265. It is designed for structural and biochemical studies, offering a stable and soluble unit that retains key functional characteristics, making it ideal for enzyme mechanism investigations and porphyrin biosynthesis research. Uroporphyrinogen-III synthase (UROIIIS), encoded by the Mgu gene in humans, catalyzes the cyclization of hydroxymethylbilane to uroporphyrinogen III, a critical branch point in porphyrin biosynthesis. This reaction is essential for producing diverse porphyrins, which serve as cofactors for enzymes involved in processes like methionine synthesis (via vitamin B12) and oxygen transport (via heme). The full-length protein is localized in the cytoplasm and cytosol, underscoring its role in fundamental metabolic pathways. This recombinant fragment supports research into porphyrin-related disorders and enzymatic function.