Recombinant GRHPR protein (His tag)

Catalog Number	546162
Species	Human
Expression System	E. coli
Accession	Q9UBQ7
Molecular Weight	Predictes a molecular mass of 37.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	1-328
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 1-328 aa (Q9UBQ7) 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 Glyoxylate reductase/hydroxypyruvate reductase (GRHPR) fragment (residues 1-328) is a high-purity protein designed for structural and biochemical studies. This fragment, selected for its stability and solubility, retains key enzymatic activities, including hydroxypyruvate reductase, glyoxylate reductase, and D-glycerate dehydrogenase functions, making it ideal for research on metabolic pathways. Glyoxylate reductase/hydroxypyruvate reductase (EC 1.1.1.79 and EC 1.1.1.81), encoded by the GRHPR gene in Homo sapiens, is a multifunctional enzyme with hydroxy-pyruvate reductase, glyoxylate reductase, and D-glycerate dehydrogenase activities. It catalyzes the reduction of hydroxypyruvate to D-glycerate and glyoxylate to glycolate, as well as the oxidation of D-glycerate to hydroxypyruvate, playing a critical role in glyoxylate and hydroxypyruvate metabolism. These functions are essential for maintaining metabolic balance, and mutations in GRHPR are linked to primary hyperoxaluria, underscoring its importance in human health and disease research.