Recombinant PGK2 protein (His tag)

Catalog Number	546696
Synonyms	Phosphoglycerate kinase, testis specific
Species	Human
Expression System	E. coli
Accession	P07205
Molecular Weight	Predictes a molecular mass of 46.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	2-417
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 2-417 aa (P07205) 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 2-417) of human Phosphoglycerate kinase 2 (PGK2), a testis-specific enzyme essential for sperm motility and male fertility. The fragment is optimized for structural and biochemical studies, offering researchers a reliable tool for investigating its catalytic and functional properties. Phosphoglycerate kinase 2 (PGK2) is a testis-specific enzyme encoded by the PGK2 gene in humans, playing a critical role in sperm motility and male fertility, as supported by research (PubMed:26677959). While not required for the completion of spermatogenesis, its function is vital for reproductive health. The protein is localized in the cytoplasm, where it contributes to glycolytic processes essential for energy production in sperm cells. This fragment, encompassing residues 2-417, represents a computationally selected stable domain, facilitating studies on its structure and biochemical activities without compromising relevance to the full-length protein's native function.