Recombinant F262 protein (His tag)

Catalog Number	541828
Synonyms	6PF-2-K/Fru-2,6-P2ase 2; PFK/FBPase 2; 6PF-2-K/Fru-2,6-P2ase heart-type isozyme
Species	Human
Expression System	E. coli
Accession	O60825
Molecular Weight	Predictes a molecular mass of 53.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	2-450
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 2-450 aa (O60825) 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 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2 (PFKFB2) fragment (residues 2-450) is a high-purity protein designed for structural and biochemical studies. This 449-amino acid fragment maintains key enzymatic activities involved in fructose-2,6-bisphosphate metabolism, offering researchers a stable and soluble tool for investigating metabolic regulation. The full-length PFKFB2 protein is a bifunctional enzyme that catalyzes both the synthesis and degradation of fructose-2,6-bisphosphate, a crucial regulator of glycolysis. This dual enzymatic activity (6-phosphofructo-2-kinase and fructose-2,6-bisphosphatase) positions PFKFB2 as a central metabolic control point, making it essential for understanding energy homeostasis and carbohydrate metabolism in human systems. The heart-type isozyme represents an important isoform for studying cardiac metabolism and related physiological processes.