Recombinant KHK protein (His tag)

Catalog Number	544660
Synonyms	Hepatic fructokinase
Species	Human
Expression System	E. coli
Accession	P50053
Molecular Weight	Predictes a molecular mass of 34.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-298
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 1-298 aa (P50053) 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 Ketohexokinase (KHK) Fragment (1-298) is a high-quality, soluble protein designed for structural and biochemical studies. This fragment, encompassing the full functional domain, retains the enzyme's ability to phosphorylate fructose, making it an ideal tool for investigating fructose metabolism and related pathways. Ketohexokinase (EC 2.7.1.3), also known as hepatic fructokinase, catalyzes the phosphorylation of the ketose sugar fructose to fructose-1-phosphate, a critical initial step in fructose metabolism. This enzyme plays a key role in carbohydrate processing, and its activity is essential for metabolic homeostasis. The provided fragment (1-298) represents a stable, soluble unit computationally optimized for experimental applications, enabling detailed analysis of its functional mechanisms without compromising relevance to the full-length protein's biological significance.