PFKM Protein, Human (HEK293, His)

Cat. No.:	HY-P71090
Synonyms:	6-phosphofructokinase; muscle type; Phosphofructo-1-kinase isozyme A; Phosphofructokinase 1; Phosphohexokinase; PFKM; PFKX
Species:	Human
Source:	HEK293
Accession:	P08237 (T2-V780)
Gene ID:	5213
Molecular Weight:	Approximately 93.0 kDa

PROPERTIES

AA Sequence

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T H E E H H A A K T   L G I G K A I A V L   T S G G D A Q G M N   A A V R A V V R V G
I F T G A R V F F V   H E G Y Q G L V D G   G D H I K E A T W E   S V S M M L Q L G G
T V I G S A R C K D   F R E R E G R L R A   A Y N L V K R G I T   N L C V I G G D G S
L T G A D T F R S E   W S D L L S D L Q K   A G K I T D E E A T   K S S Y L N I V G L
V G S I D N D F C G   T D M T I G T D S A   L H R I M E I V D A   I T T T A Q S H Q R
T F V L E V M G R H   C G Y L A L V T S L   S C G A D W V F I P   E C P P D D D W E E
H L C R R L S E T R   T R G S R L N I I I   V A E G A I D K N G   K P I T S E D I K N
L V V K R L G Y D T   R V T V L G H V Q R   G G T P S A F D R I   L G S R M G V E A V
M A L L E G T P D T   P A C V V S L S G N   Q A V R L P L M E C   V Q V T K D V T K A
M D E K K F D E A L   K L R G R S F M N N   W E V Y K L L A H V   R P P V S K S G S H
T V A V M N V G A P   A A G M N A A V R S   T V R I G L I Q G N   R V L V V H D G F E
G L A K G Q I E E A   G W S Y V G G W T G   Q G G S K L G T K R   T L P K K S F E Q I
S A N I T K F N I Q   G L V I I G G F E A   Y T G G L E L M E G   R K Q F D E L C I P
F V V I P A T V S N   N V P G S D F S V G   A D T A L N T I C T   T C D R I K Q S A A
G T K R R V F I I E   T M G G Y C G Y L A   T M A G L A A G A D   A A Y I F E E P F T
I R D L Q A N V E H   L V Q K M K T T V K   R G L V L R N E K C   N E N Y T T D F I F
N L Y S E E G K G I   F D S R K N V L G H   M Q Q G G S P T P F   D R N F A T K M G A
K A M N W M S G K I   K E S Y R N G R I F   A N T P D S G C V L   G M R K R A L V F Q
P V A E L K D Q T D   F E H R I P K E Q W   W L K L R P I L K I   L A K Y E I D L D T
S D H A H L E H I T   R K R S G E A A V
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Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution
Formulation	Supplied as a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, 5 mM EDTA, 5% Trehalose, pH 6.9.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	N/A

Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice

DESCRIPTION

Background	The PFKM protein assumes a pivotal role in cellular metabolism by catalyzing the phosphorylation of D-fructose 6-phosphate to fructose 1,6-bisphosphate using ATP as a substrate. This enzymatic activity marks the initial and committing step of glycolysis, a fundamental metabolic pathway central to energy production. By facilitating the conversion of fructose 6-phosphate to fructose 1,6-bisphosphate, PFKM plays a key role in regulating the entry of glucose into the glycolytic pathway, thereby influencing downstream energy production and cellular metabolic processes. The significance of PFKM in catalyzing this essential reaction underscores its importance in orchestrating the metabolic flux and maintaining cellular energy balance.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA