

Human 6-phosphofructokinase, Muscle Type (PFKM) ELISA Kit | PFKM elisa kit

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CATALOG #
AAA331415

REACTIVITY
Human

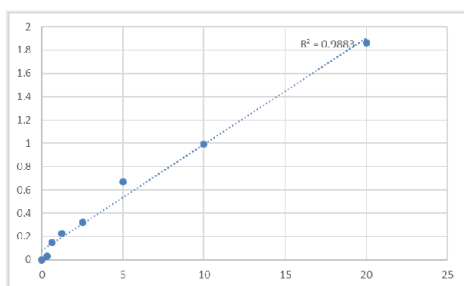
PRODUCT SYNONYMS

6-phosphofructokinase; Muscle Type (PFKM); Human 6-phosphofructokinase; Muscle Type (PFKM) ELISA Kit; PFKM; GSD7; MGC8699; PFK-1; PFK1; PFKA; PFKX; 6-phosphofructo-1-kinase; phosphofructo-1-kinase isozyme A; phosphofructokinase; polypeptide X; phosphohexokinase; PFKM elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Human 6-phosphofructokinase, muscle type (PFKM) ELISA Kit has high sensitivity and excellent specificity for detection of Human PFKM. No significant cross-reactivity or interference between Human PFKM and analogues was observed.
Sequence Length	780
Assay Type	Sandwich ELISA (Quantitative)
Samples	Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids
Detection Method	Colorimetric
Usage Notes	* Do not mix components from different kit lots or use reagents beyond the kit expiration date. * Allow all reagents to warm to room temperature for at least 30 minutes before opening. * Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination. * Unused wells must be kept desiccated at 4 degree C in the sealed bag provided. * Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes. * It is recommended that all samples and standards be assayed in duplicate or triplicate.
Preparation and Storage	Store at 2-8 degree C.

IMAGES



Standard Curve (Sample)

Fig.1. Human 6-phosphofructokinase, muscle type (PFKM) Standard Curve.

ADDITIONAL INFORMATION

Related Product Information for PFKM elisa kit	Description: This Human 6-phosphofructokinase, muscle type (PFKM) ELISA Kit employs a two-site sandwich ELISA to quantitate PFKM in samples. An antibody specific for PFKM has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any PFKM present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PFKM is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PFKM bound in the initial step. The color development is stopped and the intensity of the color is measured. Background: Phosphofructokinase-1 (PFK-1) is the most important regulatory enzyme (EC 2.7.1.11) of glycolysis. It is an allosteric enzyme made of 4 subunits and controlled by several activators and inhibitors. PFK-1 catalyzes one of the important "committed" steps of glycolysis, the conversion of fructose 6-phosphate and ATP to fructose 1,6-bisphosphate and ADP. PFK1 is allosterically inhibited by ATP and citrate (from the citric acid cycle) and its product. It is also inhibited by low pH to prevent the accumulation of hydrogen ions in muscle. The enzyme has two sites with different affinities for ATP which is both a substrate and an inhibitor. PFK1 is allosterically activated by a high concentration of AMP, but the most potent activator is fructose 2,6-bisphosphate, which is also produced from fructose-6-phosphate by PFK2.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4505749
NCBI GeneID	5213
NCBI Accession #	NP_000280.1
NCBI GenBank Nucleotide #	NP_000280.1
UniProt Accession #	P08237
NCBI Official Full Name	ATP-dependent 6-phosphofructokinase, muscle type isoform 2
NCBI Official Synonym Full Names	phosphofructokinase, muscle
NCBI Official Symbol	PFKM
NCBI Official Synonym Symbols	GSD7; PFK1; PFKA; PFKX; PFK-1; PFK-A; ATP-PFK; PPP1R122
NCBI Protein Information	ATP-dependent 6-phosphofructokinase, muscle type
UniProt Protein Name	6-phosphofructokinase, muscle type
UniProt Gene Name	PFKM
UniProt Synonym Gene Names	PFKX; PFK-A
UniProt Entry Name	K6PF_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.