PFKL Antibody (Center K433) Blocking Peptide

PRODUCT OVERVIEW

Product Name	PFKL, Blocking Peptide
Full Product Name	PFKL Antibody (Center K433) Blocking Peptide
Product Gene Name	PFKL blocking peptide
Product Synonym Names	ATP-dependent 6-phosphofructokinase; liver type ; ATP-PFK ; PFK-L; 27111 ; 6-phosphofructokinase type B; Phosphofructo-1-kinase isozyme B; PFK-B; Phosphohexokinase ; PFKL
Form/Format	The synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml deionized water for a final concentration of 1 mg/ml.
Specificity	The synthetic peptide sequence used to generate the antibody was selected from the Center region of human PFKL. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	PFKL peptide (MBS9227568) is used for blocking the activity of PFKL antibody (MBS9217168)
Molecular Weight	90,203 Da
OMIM	171860
Cellular Location	Cytoplasm
Related Product Information for PFKL blocking peptide	Catalyzes the phosphorylation of D-fructose 6-phosphate to fructose 1,6-bisphosphate by ATP, the first committing step of glycolysis.
Other Notes	Small volumes of PFKL blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PFKL purchase	MBS9227568 is a blocking peptide targeting PFKL. Also known as PFKL Antibody (Center K433) Blocking Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PFKL. It may not necessarily be applicable to this product.

NCBI GI #	134048493
NCBI GeneID	5211
NCBI Accession #	P17858.6
UniProt Primary Accession #	P17858
UniProt Secondary Accession #	Q96A64; Q96IH4; Q9BR91
UniProt Related Accession #	P17858
NCBI Official Full Name	ATP-dependent 6-phosphofructokinase, liver type
NCBI Official Synonym Full Names	phosphofructokinase, liver type
NCBI Official Symbol	PFKL
NCBI Official Synonym Symbols	PFK-B; PFK-L; ATP-PFK
UniProt Protein Name	ATP-dependent 6-phosphofructokinase, liver type

UniProt Synonym Protein Names	6-phosphofructokinase type B; Phosphofructo-1-kinase isozyme B; PFK-B; Phosphohexokinase
Protein Family	ATP-dependent 6-phosphofructokinase
UniProt Gene Name	PFKL
UniProt Synonym Gene Names	ATP-PFK; PFK-L
UniProt Entry Name	PFKAL_HUMAN
NCBI Protein Information	ATP-dependent 6-phosphofructokinase, liver type
NCBI Summary for PFKL	This gene encodes the liver (L) subunit of an enzyme that catalyzes the conversion of D-fructose 6-phosphate to D-fructose 1,6-bisphosphate, which is a key step in glucose metabolism (glycolysis). This enzyme is a tetramer that may be composed of different subunits encoded by distinct genes in different tissues. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]
UniProt Comments for PFKL	PFKL: phosphofructokinase, liver type. An ubiquitous metabolic enzyme involved in the synthesis and degradation of fructose 2,6-bisphosphate. Key control step of glycolysis. An allosteric enzyme activated by ADP, AMP, or fructose bisphosphate and inhibited by ATP or citrate. Activity: ATP D-fructose 6-phosphate = ADP D-fructose 1,6-bisphosphate. The holoenzyme consists of 4 subunits. The liver and muscle enzymes are homo-tetramers of four liver or muscle isoforms, respectively. The red blood cell enzyme consists hetero-tetramers of the muscle and liver isoforms. A subunit composition with a higher proportion of platelet type subunits is found in platelets, brain and fibroblasts. Two alternatively spliced isoforms have been described. Protein type: EC 2.7.1.11; Carbohydrate Metabolism - pentose phosphate pathway; Kinase, other; Carbohydrate Metabolism - glycolysis and gluconeogenesis; Carbohydrate Metabolism - galactose; Carbohydrate Metabolism - fructose and mannose Chromosomal Location of Human Ortholog: 21q22.3 Cellular Component: 6-phosphofructokinase complex; cytosol; membrane Molecular Function: 6-phosphofructokinase activity; ATP binding; identical protein binding; kinase binding; protein binding Biological Process: fructose 1,6-bisphosphate metabolic process; fructose 6-phosphate metabolic process; glycolysis; protein oligomerization; response to glucose stimulus
Research Articles on PFKL	**1.** findings showed glycosylation inhibited PFK1 activity and redirected glucose flux through the pentose phosphate pathway, thereby conferring a selective growth advantage on cancer cells
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.