

Product datasheet for CF503981

OriGene Technologies, Inc.

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PFKP Mouse Monoclonal Antibody [Clone ID: OTI2E10]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI2E10

Applications: FC, IHC, WB

Recommended Dilution: WB 1:500~2000, IHC 1:150, FLOW 1:100

Reactivity: Human, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PFKP(NP_002618) produced in HEK293T

cel

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 85.4 kDa

Gene Name: phosphofructokinase, platelet

Database Link: NP 002618

Entrez Gene 56421 MouseEntrez Gene 60416 RatEntrez Gene 722330 MonkeyEntrez Gene

5214 Human Q01813





Background:

The PFKP gene encodes the platelet isoform of phosphofructokinase (PFK) (ATP:D-fructose-6-phosphate-1-phosphotransferase, EC 2.7.1.11). PFK catalyzes the irreversible conversion of fructose-6-phosphate to fructose-1,6-bisphosphate and is a key regulatory enzyme in glycolysis. The PFKP gene, which maps to chromosome 10p, is also expressed in fibroblasts. See also the muscle (PFKM; MIM 610681) and liver (PFKL; MIM 171860) isoforms of phosphofructokinase, which map to chromosomes 12q13 and 21q22, respectively. Vora (1981) [PubMed 6451249] determined that full tetrameric phophofructokinase enzyme expressed in platelets can be composed of subunits P4, P3L, and P2L2. [supplied by OMIM]

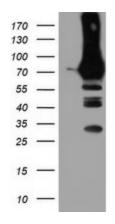
Synonyms: ATP-PFK; PFK-C; PFK-P; PFKF

Protein Families: Druggable Genome

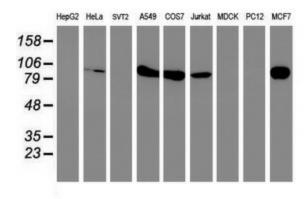
Protein Pathways: Fructose and mannose metabolism, Galactose metabolism, Glycolysis / Gluconeogenesis,

Metabolic pathways, Pentose phosphate pathway

Product images:

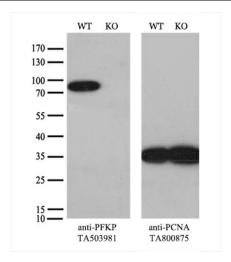


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PFKP ([RC200673], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PFKP. Positive lysates [LY400932] (100ug) and [LC400932] (20ug) can be purchased separately from OriGene.

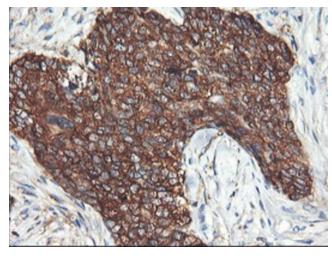


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PFKP monoclonal antibody.

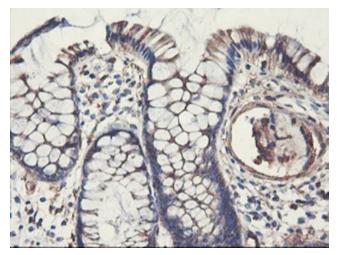




Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and PFKP-Knockout HeLa cells (KO, Cat# [LC831752]) were separated by SDS-PAGE and immunoblotted with anti-PFKP monoclonal antibody [TA503981] (1:500). Then the blotted membrane was stripped and reprobed with anti-PCNA antibody as a loading control.

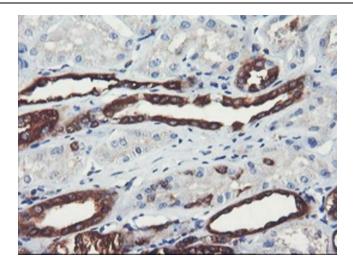


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

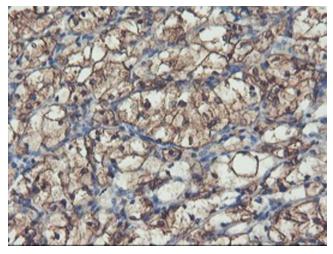


Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

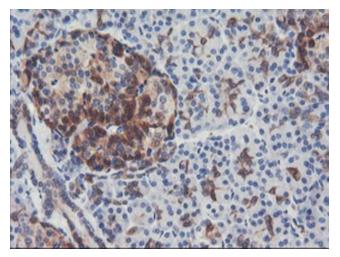




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

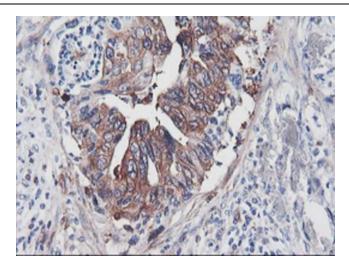


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

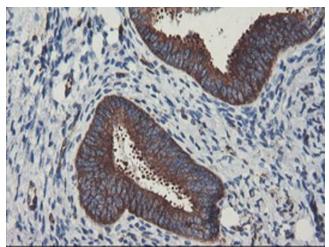


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

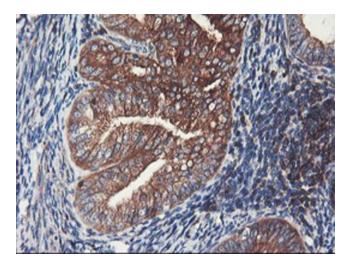




Immunohistochemical staining of paraffinembedded Carcinoma of Human pancreas tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

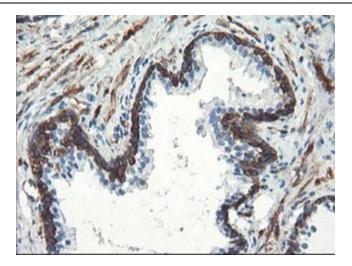


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

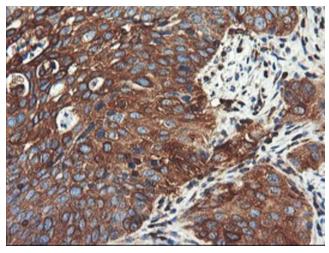


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

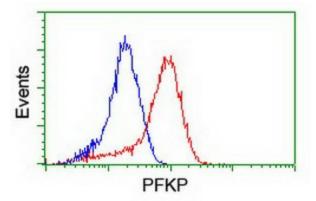




Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

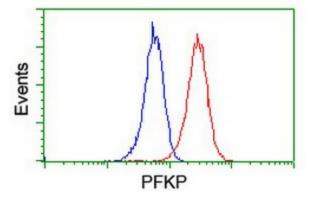


Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Flow cytometric Analysis of Hela cells, using anti-PFKP antibody ([TA503981]), (Red), compared to a nonspecific negative control antibody, (Blue).





Flow cytometric Analysis of Jurkat cells, using anti-PFKP antibody ([TA503981]), (Red), compared to a nonspecific negative control antibody, (Blue).