

Product datasheet for CF503980

PFKP Mouse Monoclonal Antibody [Clone ID: OTI3A12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3A12
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PFKP(NP_002618) produced in HEK293T cell.
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 Mouse Entrez Gene 60416 Rat Entrez Gene 5214 Human Q01813

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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 phosphofructokinase enzyme expressed in platelets can be composed of subunits P4, P3L, and P2L2. [supplied by OMIM]

Synonyms:

ATP-PFK; PFK-C; PFK-P; PFKF

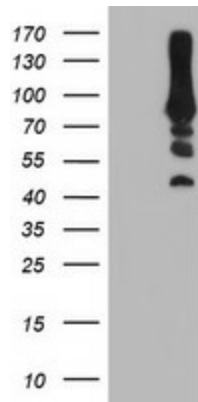
Protein Families:

Druggable Genome

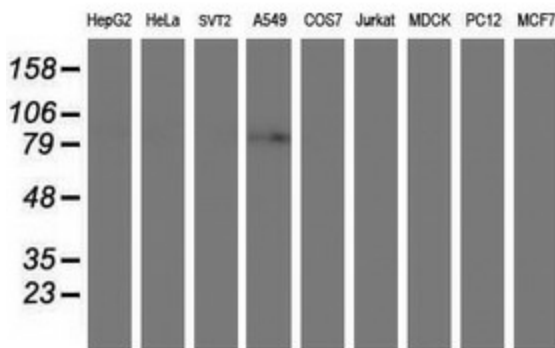
Protein Pathways:

Fructose and mannose metabolism, Galactose metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway

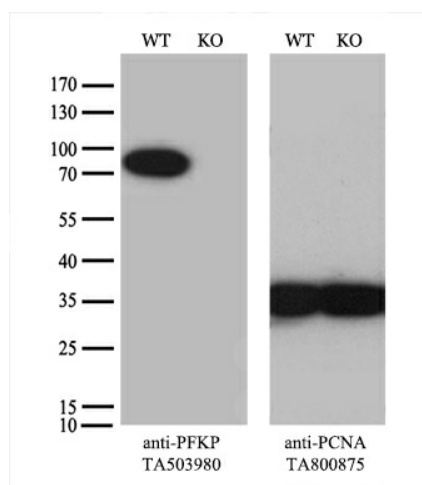
Product images:



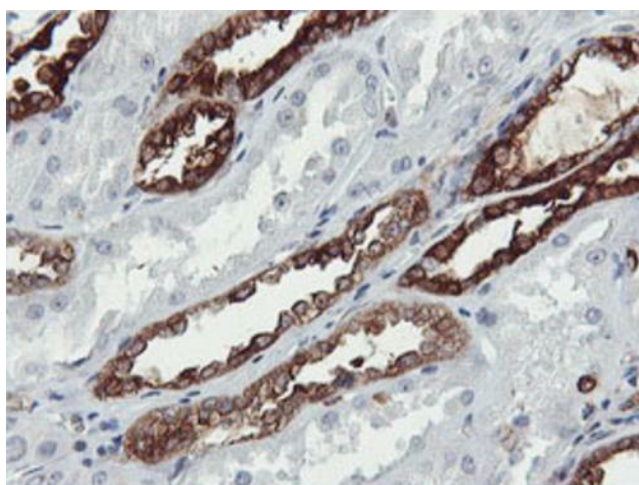
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PFKP ([RC200673], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PFKP. Positive lysates [LY400932] (100ug) and [LC400932]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



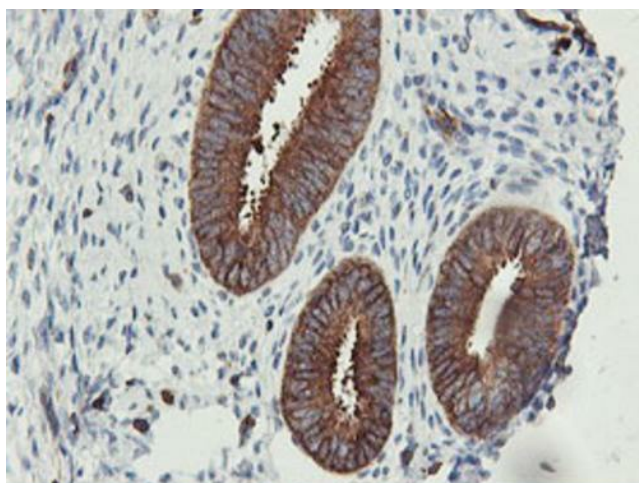
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PFKP monoclonal antibody.



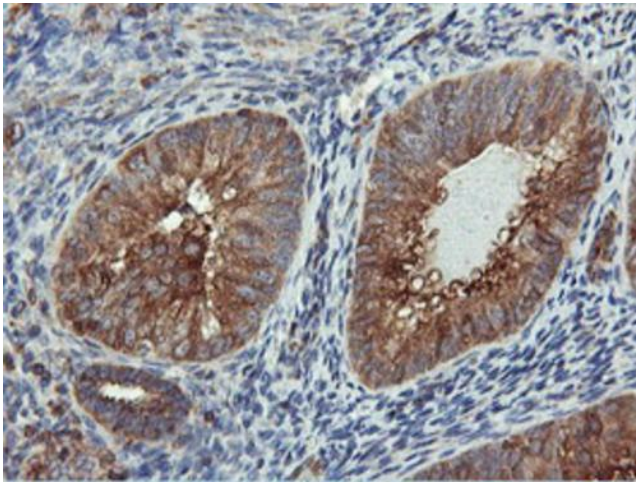
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and PFKP-Knockout HeLa cells (KO, Cat# [LC831752]) were separated by SDS-PAGE and immunoblotted with anti-PFKP monoclonal antibody [TA503980] (1:500). Then the blotted membrane was stripped and reprobed with anti-PCNA antibody as a loading control.



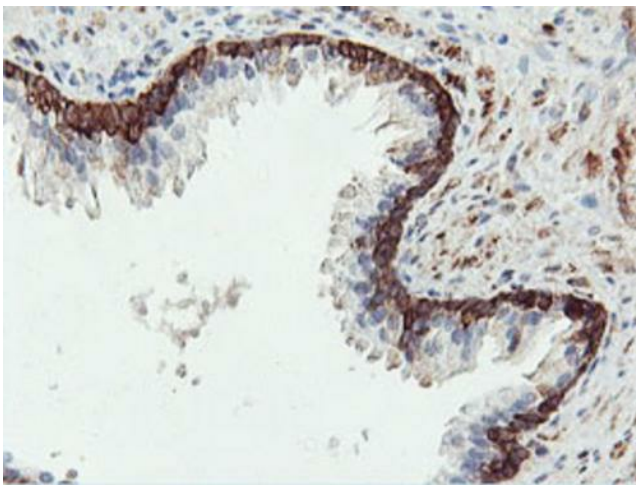
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



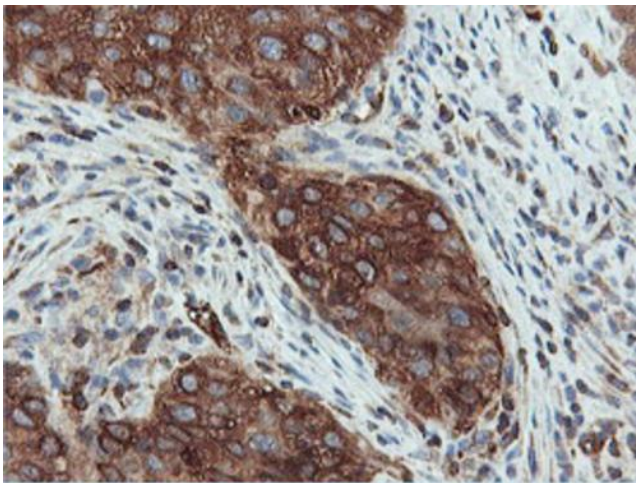
Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



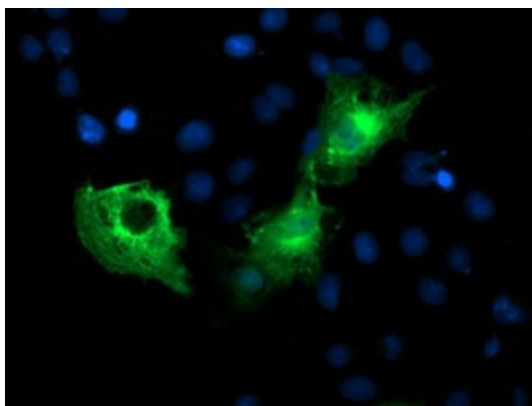
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



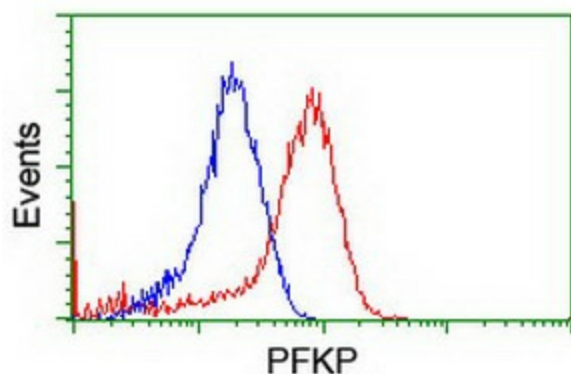
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



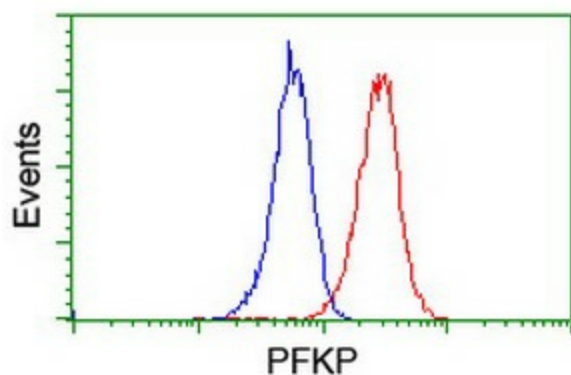
Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-PFKP mouse monoclonal antibody ([TA503980]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PFKP ([RC200673]).



Flow cytometric Analysis of HeLa cells, using anti-PFKP antibody ([TA503980]), (Red), compared to a nonspecific negative control antibody, (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-PFKP antibody ([TA503980]), (Red), compared to a nonspecific negative control antibody, (Blue).