

# Product datasheet for TA503982BM

#### OriGene Technologies, Inc.

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## PFKP Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI1D6]

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1D6

**Applications:** FC, IF, IHC, WB

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

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PFKP(NP\_002618) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol.

**Concentration:** 0.5 mg/ml

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

(protein A/G)

Conjugation: HRP

**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 5214 Human

<u>Q018</u>13





### 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]

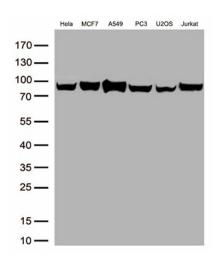
**Synonyms:** ATP-PFK; PFK-C; PFK-P; PFKF

**Protein Families:** Druggable Genome

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

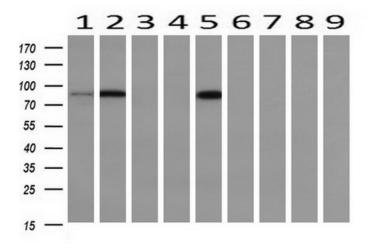
Metabolic pathways, Pentose phosphate pathway

## **Product images:**

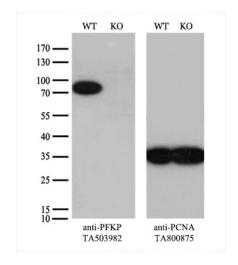


Western blot analysis of extracts (50ug per lane) from 6 cell lines lysates by using anti-PFKP monoclonal antibody([TA503982], 1:500)





Western blot analysis of extracts (10ug) from 9 Human tissue by using anti-PFKP monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon).



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 [TA503982] (1:500). Then the blotted membrane was stripped and reprobed with anti-PCNA antibody as a loading control.

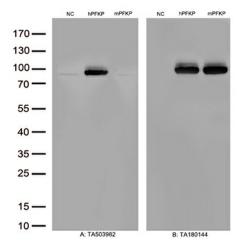
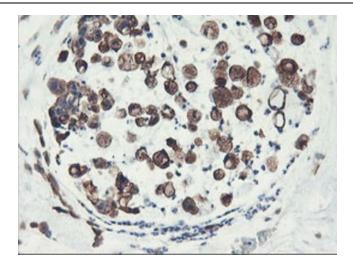
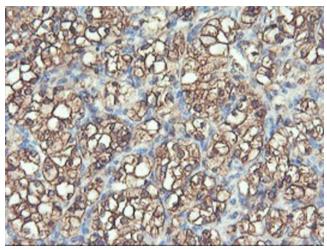


Figure A, Western blot analysis of overexpressed lysates(15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], NC), human PFKP plasmid ([RC200673], hPFKP), mouse PFKP plasmid ([MR210641], mPFKP) using anti-PFKP antibody [TA503982](1:500). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)

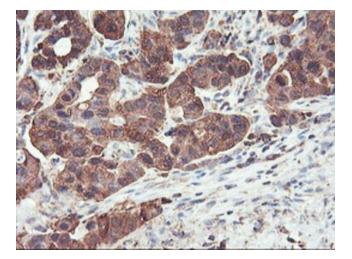




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

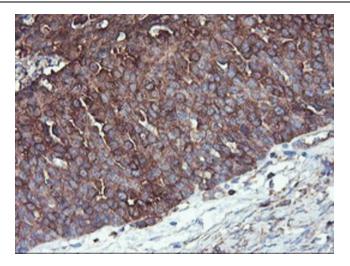


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

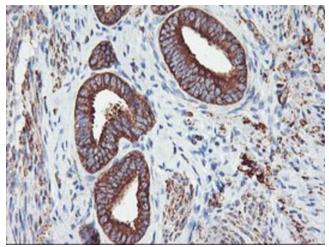


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

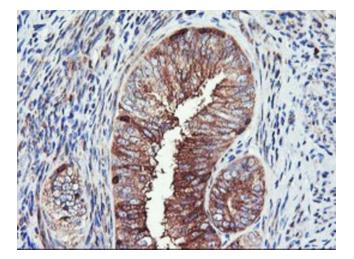




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

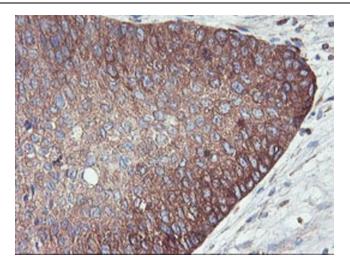


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

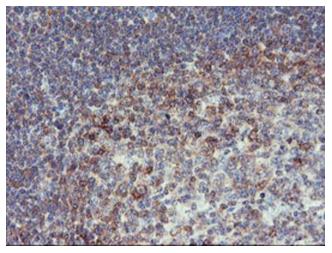


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

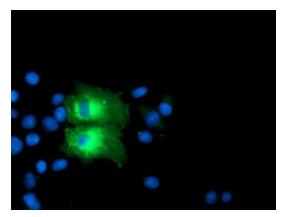




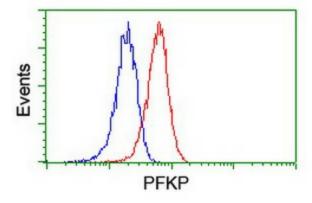
Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-PFKP mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Human tonsil 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.



Anti-PFKP mouse monoclonal antibody ([TA503982]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PFKP ([RC200673]).



Flow cytometric Analysis of Jurkat cells, using anti-PFKP antibody ([TA503982]), (Red), compared to a nonspecific negative control antibody, (Blue).