#12746 Store at -20°C

PFKP (D2E5) Rabbit mAb

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #5214
UniProt ID #Q01813

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IF-IC	H, Mk	80 kDa	Rabbit IgG**
Endogenous			

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:100

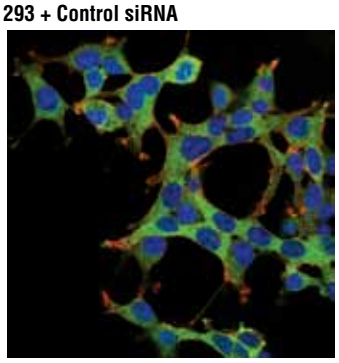
For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

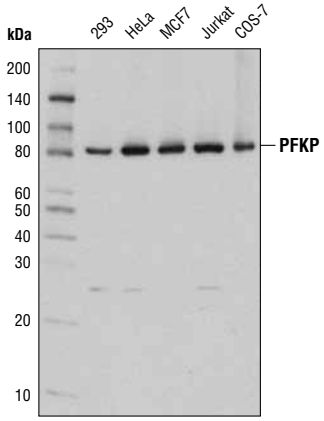
Background: Phosphofructokinase (PFK) catalyzes the phosphorylation of fructose-6-phosphate in glycolysis (1). There are three isozymes: muscle-type, liver-type, and platelet-type (2,3). Platelet-type phosphofructokinase (PFKP) is expressed in various cell types (4,5). Research studies have shown that genetic variations in PFKP are associated with individuals born small for gestational age that are prone to obesity and diabetes later in adulthood (6).

Specificity/Sensitivity: PFKP (D2E5) Rabbit mAb recognizes endogenous levels of total PFKP protein.

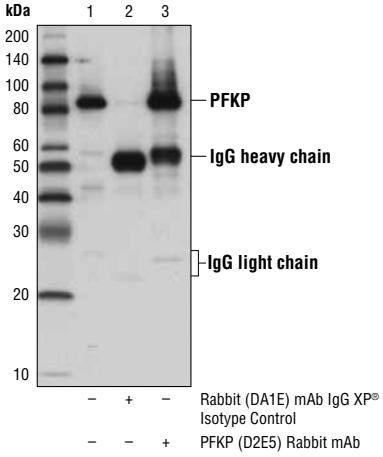
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human PFKP protein.



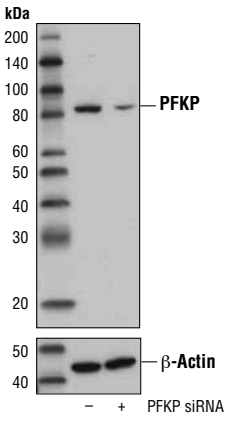
Confocal immunofluorescent analysis of 293 cells, transfected with SignalSilence® Control siRNA (Unconjugated) #6568 (upper) or a PFKP-specific siRNA (lower), using PFKP (D2E5) Rabbit mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).



Western blot analysis of extracts from various cell lines using PFKP (D2E5) Rabbit mAb.



Immunoprecipitation of PFKP from HeLa cell extracts, using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or PFKP (D2E5) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using PFKP (D2E5) Rabbit mAb.



Western blot analysis of extracts from 293T cells, transfected with 100 nM SignalSilence® Control siRNA (Unconjugated) #6568 (-) or SignalSilence® PFKP siRNA (+), using PFKP (D2E5) Rabbit mAb and β-Actin (D6A8) Rabbit mAb #8457.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

Background References:

(1) Mediavilla, D. et al. (2008) *J Biochem* 144, 235-44.
(2) Eto, K. et al. (1994) *Biochem Biophys Res Commun* 198, 990-8.
(3) Hannemann, A. et al. (2005) *Gene* 345, 237-47.
(4) Morrison, N. et al. (1992) *Hum Genet* 89, 105-6.
(5) Vora, S. (1983) *Isozymes Curr Top Biol Med Res* 11, 3-23.
(6) Morgan, A.R. et al. (2010) *BMC Med Genet* 11, 125.