

**PFKFB3 Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	60	Rabbit	#Q16875	5209

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

PFKFB3 Antibody recognizes endogenous levels of total PFKFB3 protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly452 of human PFKFB3 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

The bifunctional 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase (PFK/FBPase or PFKFB) catalyzes the synthesis and degradation of fructose 2,6-bisphosphate and regulates its steady-state level (1,2). Fructose 2,6-bisphosphate activates phosphofructokinase, a rate-limiting enzyme in glycolysis, by allosteric regulation (1,2). Four different PFKFB isoforms (PFKFB1, PFKFB2, PFKFB3, and PFKFB4) have been identified (1,2). One of them, PFKFB3/iPFK-2, was shown to be inducible by hypoxia leading to increased glycolysis under hypoxic conditions (2). Research studies have shown that PFKFB3/iPFK-2 is also highly expressed in some types of human cancer (3).

**Background References**

1. Atsumi, T. et al. (2005) *Diabetes* 54, 3349-57.
2. Kim, S.G. et al. (2006) *J Biol Chem* 281, 2939-44.
3. Atsumi, T. et al. (2002) *Cancer Res* 62, 5881-7.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

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

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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