

#13045 Store at -20C

PFKFB2 (D7G5R) Rabbit mAb**Cell Signaling**
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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC	H Mk	Endogenous	55	Rabbit IgG	#O60825	5208

Product Usage Information**Application**

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:800

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.

Specificity / Sensitivity

PFKFB2 (D7G5R) Rabbit mAb recognizes endogenous levels of total PFKFB2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro454 within the fructose-2,6-bisphosphatase region of human PFKFB2 protein.

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). Research studies indicate that amino acids activate PFKFB2 through Akt-dependent phosphorylation at Ser483 on PFKFB2 (3). In addition, androgen increases the expression of PFKFB2 in prostate cancer cells (4).

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. Novellasdemunt, L. et al. (2013) *J Biol Chem* 288, 10640-51.
4. Moon, J.S. et al. (2011) *Biochem J* 433, 225-33.

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

WB: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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