

FBP1/FBPase 1 (D2T7F) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	39	Rabbit IgG	#P09467	2203

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, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

FBP1/FBPase 1 (D2T7F) Rabbit mAb recognizes endogenous levels of total FBP1/FBPase 1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val106 of human FBP1/FBPase 1 protein.

Background

Fructose-1,6-bisphosphatase 1 (FBP1 or FBPase 1), a rate limiting enzyme in gluconeogenesis, catalyzes the conversion of fructose-1,6-bisphosphate to fructose-6-phosphate (1). Inhibition of *FBP1* expression in basal-like breast cancer (BLBC) cells leads to metabolic reprogramming, including enhanced glycolysis, which leads to increased glucose uptake, biosynthesis of macromolecules, and activation of PKM2 (1). This metabolic reprogramming endows tumor cells with cancer stem cell (CSC)-like properties, thereby increasing their tumorigenicity (1). Depletion of FBP1 was also reported in more than 600 clear cell renal cell carcinoma (ccRCC) tumors, suggesting that FBP1 may inhibit ccRCC tumor progression (2).

Background References

1. Dong, C. et al. (2013) *Cancer Cell* 23, 316-31.
2. Li, B. et al. (2014) *Nature* 513, 251-5.

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 nonfat dry milk, 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

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