

Store at
-20C
#65575**PDP1 (D8Y6L) Rabbit mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R Mk	Endogenous	55	Rabbit IgG	#Q9P0J1	54704

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

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

PDP1 (D8Y6L) Rabbit mAb recognizes endogenous levels of total PDP1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu327 of human PDP1 protein.

Background

Pyruvate dehydrogenase (PDH) catalyzes decarboxylation of the glycolytic intermediate pyruvate to acetyl-CoA (1). Acetyl-CoA is further metabolized in the tricarboxylic acid (TCA) cycle to generate ATP and NADH (1). Pyruvate dehydrogenase kinase 1 (PDHK1) phosphorylates PDH to suppress its activity, while pyruvate dehydrogenase phosphatase 1 (PDP1) dephosphorylates PDH to enhance its activity (1). Phosphorylation of PDP1 at Tyr94 inhibits PDP1 and has been shown to be present in a variety of cancer cell lines and primary human leukemia cells (2).

Background References

- Fan, J. et al. (2014) *Mol Cell* 53, 534-48.
- Shan, C. et al. (2014) *J Biol Chem* 289, 21413-22.

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 **IP:** Immunoprecipitation

Cross-Reactivity Key

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

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