

#23887 Store at -20°C

PANK1 (D2W3N) Rabbit mAb**Cell Signaling**
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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:
WB, IP	H Mk	Endogenous	50	Rabbit IgG	#Q8TE04	53354

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

PANK1 (D2W3N) Rabbit mAb recognizes endogenous levels of total PANK1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro153 of human PANK1 protein.

Background

Pantothenate kinase 1 (PANK1) is the rate-limiting enzyme in coenzyme A (CoA) synthesis (1,2). PPARα-mediated transcriptional regulation of PANK1 plays an important role in controlling CoA levels in hepatocytes (1). Research studies indicate that PANK1 expression, along with microRNA-107, decreases in a murine macrophage model upon lipopolysaccharide (LPS) exposure in a PPARα-dependent manner (3). Additional studies show that the corresponding *PANK1* gene is a direct target of tumor suppressor p53 and that p53 regulates energy homeostasis through control of PANK1 expression (2).

Background References

1. Ramaswamy, G. et al. (2004) *J Lipid Res* 45, 17-31.
2. Wang, S.J. et al. (2013) *Cell Cycle* 12, 753-61.
3. Hennessy, E.J. et al. (2011) *J Biol Chem* 286, 25531-9.

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**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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