# **Product Datasheet**

# Pyruvate Dehydrogenase Kinase 1/PDK1 Antibody - BSA Free NB100-2384

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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# NB100-2384

Pyruvate Dehydrogenase Kinase 1/PDK1 Antibody - BSA Free

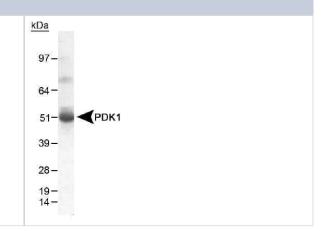
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Product Information			
Unit Size	0.1 ml		
Concentration	0.5 mg/ml		
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.		
Clonality	Polyclonal		
Preservative	0.05% Sodium Azide		
Isotype	IgG		
Purity	Immunogen affinity purified		
Buffer	Tris-Glycine and 0.15M NaCl		
Target Molecular Weight	49 kDa		

Product Description	
Host	Rabbit
Gene ID	5163
Gene Symbol	PDK1
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 25925251).
Immunogen	A synthetic peptide made to an internal portion of the human PDK1 protein sequence (between residues 300-400). [Swiss-Prot Q15118]

<b>Product Application Details</b>	
Applications	Western Blot, Immunoblotting
Recommended Dilutions	Western Blot 0.5-2 ug/ml, Immunoblotting reported in scientific literature (PMID 28366875)
Application Notes	This PDK1 antibody is useful for Western blot, where a band is seen at ~49 kDa representing PDK1 protein. There are also two higher and one lower non-specific molecular weight bands. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

# **Images**

Western Blot: PDK-1 Antibody [NB100-2384] - Detection of PDK-1 in human heart lysate using NB 100-2384 at 0.5 ug/ml.





#### **Publications**

Pastor-Soler NM, Sutton TA, Mang HE et al. Muc1 is protective during kidney ischemia-reperfusion injury Am J Physiol Renal Physiol. 2015-04-28 [PMID: 25925251] (WB, Mouse)

Gibier JB, Hemon B, Fanchon M et al. Dual role of MUC1 mucin in kidney ischemia-reperfusion injury: Nephroprotector in early phase, but pro-fibrotic in late phase. Biochim. Biophys. Acta. 2017-03-31 [PMID: 28366875] (IB)

Ho N, Coomber BL. Pyruvate dehydrogenase kinase expression and metabolic changes following dichloroacetate exposure in anoxic human colorectal cancer cells. Exp Cell Res 2015-02-01 [PMID: 25536473] (Human)

Lin HP, Jiang SS, Chuu CP. Caffeic Acid Phenethyl Ester Causes p21 Induction, Akt Signaling Reduction, and Growth Inhibition in PC-3 Human Prostate Cancer Cells. PLoS One. 2012-02-07 [PMID: 22347457]



#### **Procedures**

#### Western Blot Protocol for PDK1 Antibody (NB100-2384)

Pyruvate Dehydrogenase Kinase 1/PDK1 Antibody: Western Blot Protocol

- 1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 40 ug of total protein per lane.
- 2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
- 3. Rinse membrane with dH2O and then stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
- 4. Rinse the blot in TBS for approximately 5 minutes.
- 5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS for 1 hour at room temperature (RT).
- 6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
- 7. Dilute the rabbit anti-PDK1 primary antibody (NB 100-2384) in blocking buffer and incubate 1 hour at RT.
- 8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
- 9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) and incubate 1 hour at room temperature.
- 10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
- 11. Apply the detection reagent of choice in accordance with the manufacturer's instructions (we used BioFX Super Plus ECL).

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.





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# **Products Related to NB100-2384**

NB820-59217 Human Heart Whole Tissue Lysate (Adult Whole Normal)

NB100-2384PEP Pyruvate Dehydrogenase Kinase 1/PDK1 Antibody Blocking Peptide

HAF008 Goat anti-Rabbit IgG Secondary Antibody [HRP]

NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

NBP2-24891 Rabbit IgG Isotype Control

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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