

**Phospho-PDX1(S66) Antibody Blocking peptide**  
Synthetic peptide  
Catalog # BP3628a**Specification****Phospho-PDX1(S66) Antibody Blocking peptide - Product Information**Primary Accession [O00330](#)**Phospho-PDX1(S66) Antibody Blocking peptide - Additional Information**

Gene ID 8050

**Other Names**

Pyruvate dehydrogenase protein X component, mitochondrial, Dihydrolipoamide dehydrogenase-binding protein of pyruvate dehydrogenase complex, E3-binding protein, E3BP, Lipoyl-containing pyruvate dehydrogenase complex component X, proX, PDHX, PDX1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP3628a](/products/AP3628a) was selected from the region of human Phospho-PDX1-pS66. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Phospho-PDX1(S66) Antibody Blocking peptide -****Phospho-PDX1(S66) Antibody Blocking peptide - Background**

PDX1, located in the mitochondrial matrix, is required for anchoring dihydrolipoamide dehydrogenase (E3) to the dihydrolipoamide transacetylase (E2) core of the pyruvate dehydrogenase complexes of eukaryotes. This specific binding is essential for a functional PDH complex. Eukaryotic pyruvate dehydrogenase complexes are organized about a core consisting of the oligomeric dihydrolipoamide acetyl-transferase, around which are arranged multiple copies of pyruvate dehydrogenase, dihydrolipoamide dehydrogenase and protein X bound by noncovalent bonds. Defects in PDHX are a cause of lacticacidemia. PDX1 belongs to the 2-oxoacid dehydrogenase family and contains 1 lipoyl-binding domain.

**Phospho-PDX1(S66) Antibody Blocking peptide - References**

Ling, M., et al., Hum. Mol. Genet. 7(3):501-505 (1998). Aral, B., et al., Am. J. Hum. Genet. 61(6):1318-1326 (1997). Harris, R.A., et al., J. Biol. Chem. 272(32):19746-19751 (1997). Yu, W., et al., Genome Res. 7(4):353-358 (1997).

**Protein Information****Name** PDHX**Synonyms** PDX1**Function**

Required for anchoring dihydrolipoamide dehydrogenase (E3) to the dihydrolipoamide transacetylase (E2) core of the pyruvate dehydrogenase complexes of eukaryotes. This specific binding is essential for a functional PDH complex.

**Cellular Location**

Mitochondrion matrix.

**Phospho-PDX1(S66) Antibody Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)