

Phospho-PDX1(S66) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3628a**Specification**

Phospho-PDX1(S66) Antibody Blocking peptide - Product InformationPrimary 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 - 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](#)

Phospho-PDX1(S66) Antibody Blocking peptide - Images

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).