

**MYT1 (PKMYT1) Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP7174a****Specification**

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**MYT1 (PKMYT1) Antibody (Center) Blocking peptide - Product Information**Primary Accession [Q99640](#)**MYT1 (PKMYT1) Antibody (Center) Blocking peptide - Additional Information****Gene ID** 9088**Other Names**

Membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase, Myt1 kinase, PKMYT1, MYT1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7174a](/product/products/AP7174a) was selected from the Center region of human PKMYT1. 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.

**MYT1 (PKMYT1) Antibody (Center) Blocking peptide - Protein Information****Name** PKMYT1**Synonyms** MYT1**Function**

Acts as a negative regulator of entry into mitosis (G2 to M transition) by phosphorylation of the CDK1 kinase specifically when CDK1 is complexed to cyclins (PubMed: [9268380](http://www.uniprot.org/citations/9268380), PubMed: [9001210](http://www.uniprot.org/citations/9001210), PubMed: [10504341](http://www.uniprot.org/citations/10504341), PubMed: [10373560](http://www.uniprot.org/citations/10373560)). Mediates phosphorylation of CDK1 predominantly on 'Thr-14'. Also involved in Golgi fragmentation (PubMed: [9268380](http://www.uniprot.org/citations/9268380), PubMed: [9001210](http://www.uniprot.org/citations/9001210)).

May be involved in phosphorylation of CDK1 on 'Tyr-15' to a lesser degree, however tyrosine kinase activity is unclear and may be indirect (PubMed:<a href="http://www.uniprot.org/citations/9268380" target="\_blank">9268380</a>, PubMed:<a href="http://www.uniprot.org/citations/9001210" target="\_blank">9001210</a>).

**Cellular Location**

Endoplasmic reticulum membrane; Peripheral membrane protein. Golgi apparatus membrane; Peripheral membrane protein

**MYT1 (PKMYT1) Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**MYT1 (PKMYT1) Antibody (Center) Blocking peptide - Images****MYT1 (PKMYT1) Antibody (Center) Blocking peptide - Background**

The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase preferentially phosphorylates and inactivates cell division cycle 2 protein (CDC2), and thus negatively regulates cell cycle G2/M transition. This kinase is associated with the membrane throughout the cell cycle. Its activity is highly regulated during the cell cycle. Protein kinases AKT1/PKB and PLK (Polo-like kinase) have been shown to phosphorylate and regulate the activity of this kinase. Alternatively spliced transcript variants encoding distinct isoforms have been reported. Transcript Variant: This variant (1) encodes the longer isoform (1).

**MYT1 (PKMYT1) Antibody (Center) Blocking peptide - References**

Dai, X., et al., J. Invest. Dermatol. 122(6):1356-1364 (2004). Nakajima, H., et al., J. Biol. Chem. 278(28):25277-25280 (2003). Passer, B.J., et al., Proc. Natl. Acad. Sci. U.S.A. 100(5):2284-2289 (2003). Okumura, E., et al., Nat. Cell Biol. 4(2):111-116 (2002). Booher, R.N., et al., J. Biol. Chem. 272(35):22300-22306 (1997).