

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

Specification

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 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:10373560, PubMed:10504341, PubMed:9001210, PubMed:9268380). Mediates phosphorylation of CDK1 predominantly on 'Thr-14'. Also involved in Golgi fragmentation (PubMed:9001210, PubMed:9268380).

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:9001210, PubMed:9268380).

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).