

MYT1 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP7257b**Specification**

MYT1 Blocking Peptide (C-term) - Product InformationPrimary Accession [Q99640](#)**MYT1 Blocking Peptide (C-term) - 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 is selected from aa 488-499 of HUMAN PKMYT1

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

href="http://www.uniprot.org/citations/9001210" target="_blank">9001210).

Cellular Location

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

MYT1 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

MYT1 Blocking Peptide (C-term) - Images**MYT1 Blocking Peptide (C-term) - 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 Blocking Peptide (C-term) - References

Dai, X., et al., J. Invest. Dermatol. 122(6):1356-1364 (2004).
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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).