

MYT1 (PKMYT1) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7196b

Specification

MYT1 (PKMYT1) Antibody (C-term) - Product Information

Application Primary Accession	WB,E <u>099640</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54521
Antigen Region	452-482

MYT1 (PKMYT1) Antibody (C-term) - Additional Information

Gene ID 9088

Other Names

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

Target/Specificity

This MYT1 (PKMYT1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 452-482 amino acids from the C-terminal region of human MYT1 (PKMYT1).

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MYT1 (PKMYT1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MYT1 (PKMYT1) Antibody (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:<u>10373560</u>, PubMed:<u>10504341</u>, PubMed:<u>9001210</u>, PubMed:<u>9268380</u>). Mediates phosphorylation of CDK1 predominantly on 'Thr-14'. Also involved in Golgi fragmentation (PubMed:<u>9001210</u>, PubMed:<u>9268380</u>). 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:<u>9001210</u>, PubMed:<u>9268380</u>).

Cellular Location

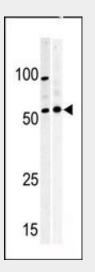
Endoplasmic reticulum membrane; Peripheral membrane protein. Golgi apparatus membrane; Peripheral membrane protein

MYT1 (PKMYT1) Antibody (C-term) - Protocols

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

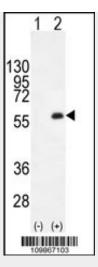
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MYT1 (PKMYT1) Antibody (C-term) - Images



Western blot analysis of anti-PKMYT1 Pabin A375(left) and Y79 (right)cell line lysate. PKMYT1(arrow) was detected using the purified Pab.





Western blot analysis of PKMYT1 (arrow) using rabbit polyclonal PKMYT1 C-term (Cat. #AP7196b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PKMYT1 gene.

MYT1 (PKMYT1) Antibody (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 (PKMYT1) Antibody (C-term) - 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).