

## MYT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7257b

## **Specification**

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

Application WB,E
Primary Accession Q99640
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

## MYT1 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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide corresponding to amino acid residues surrounding T495 of human MYT1.

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

## MYT1 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: 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**

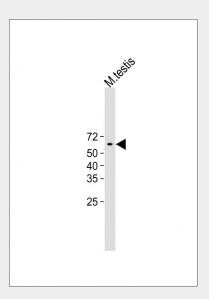
Endoplasmic reticulum membrane; Peripheral membrane protein. Golgi apparatus membrane; Peripheral membrane protein

## MYT1 Antibody (C-term) - Protocols

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

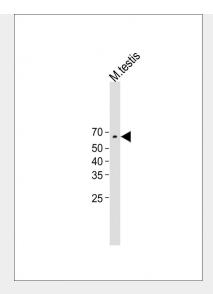
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## MYT1 Antibody (C-term) - Images

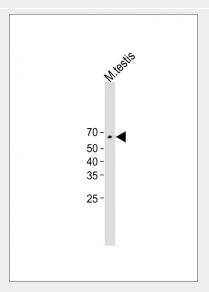


All lanes : Anti-MYT1 Antibody (C-term) at 1:500 dilution Lane 1 Mouse testis lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 55kDa Blocking/Dilution buffer: 5% NFDM/TBST.



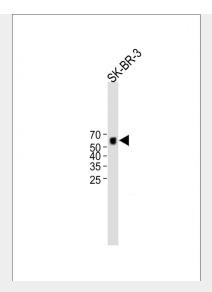


All lanes: Anti-MYT1 Antibody (C-term) at 1:500 dilution Lane1:Mouse testis lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 55kDa Blocking/Dilution buffer: 5% NFDM/TBST.

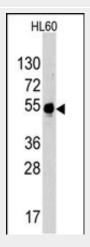


All lanes: Anti-MYT1 Antibody (C-term) at 1:500 dilution Lane1:Mouse testis lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 55kDa Blocking/Dilution buffer: 5% NFDM/TBST.





All lanes: Anti-MYT1 Antibody (C-term) at 1:2000 dilution Lane 1:SK-BR-3whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 55kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of anti-MYT1 Antibody (C-term) (Cat.#AP7257b) in HL60 cell line lysates (35ug/lane). MYT1(arrow) was detected using the purified Pab (1:60 dilution).

## MYT1 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 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).