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MYT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7257b

Product Information

Application	WB, E
Primary Accession	Q99640
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB07896
Calculated MW	54521

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 0.05% (V/V) Proclin 300. 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.

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

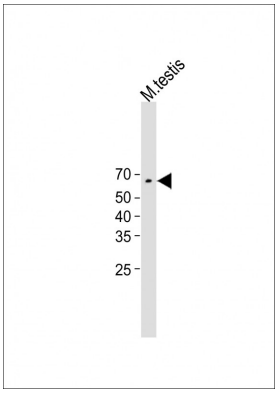
Background

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).

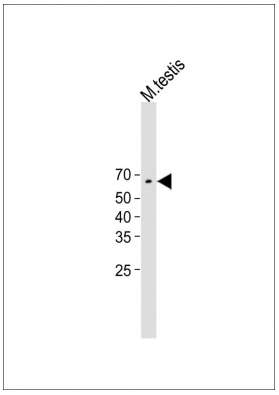
References

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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).

Images

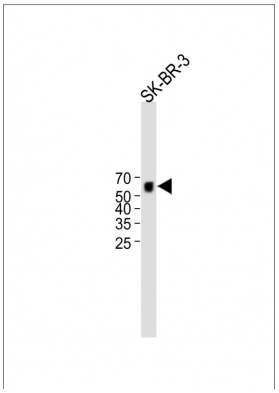


All lanes : Anti-MYT1 Antibody (C-term) at 1:500 dilution Lane1:Mouse testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 55kDa Blocking/Dilution buffer: 5% NFDM/TBST.

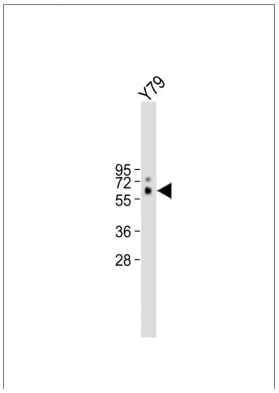


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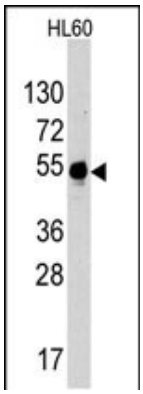
All lanes : Anti-MYT1 Antibody (C-term) at 1:2000 dilution



Lane 1:SK-BR-3whole cell lysate Lysates/proteins at 20 µg 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:Y79 whole cell lysate Lysates/proteins at 20 µg 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.