

Product Name: Myt 1 Rabbit Polyclonal Antibody
Catalog #: APRab14358



Summary

Production Name	Myt 1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	PKMYT1
Alternative Names	PKMYT1; MYT1; Membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase; Myt1 kinase
Gene ID	9088.0
SwissProt ID	Q99640.The antiserum was produced against synthesized peptide derived from human PKMYT1. AA range:49-98

Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:20000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	50kDa

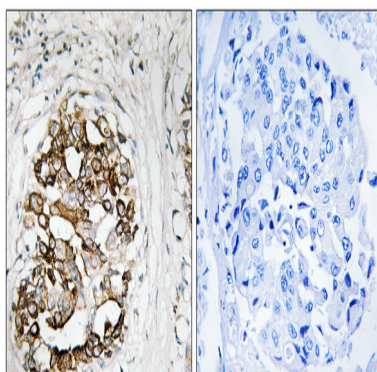
Background

This gene encodes a member of the serine/threonine protein kinase family. The encoded protein is a membrane-associated kinase that negatively regulates the G2/M transition of the cell cycle by phosphorylating and inactivating cyclin-dependent kinase 1. The activity of the encoded protein is regulated by polo-like kinase 1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The membrane-association motif is essential for the localization to membrane of Golgi stack. According to some authors, it is a transmembrane domain; the existence of a transmembrane region is however unproven.,enzyme regulation:Negatively regulated by hyperphosphorylation during mitosis. The hyperphosphorylated form does not associate with CCNB1-CDC2 complexes. The PLK1 protein kinase may be required for mitotic phosphorylation.,function:Acts as a negative regulator of entry into mitosis (G2 to M transition) by phosphorylation of the cdc2 kinase specifically when cdc2 is complexed to cyclins. Mediates phosphorylation of cdc2 predominantly on 'Thr-14'. Also involved in Golgi fragmentation. May be involved in phosphorylation of cdc2 on 'Tyr-15' to a lesser degree, however tyrosine kinase activity is unclear and may be indirect. May be a downstream target of Notch signaling pathway during eye development.,PTM:Autophosphorylated. Phosphorylated by CDC2-CCNB1 complexes on undefined serine and threonine residues. The phosphorylation by CDC2-CCNB1 complexes may inhibit the catalytic activity.,sequence caution:Chimeric cDNA.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. WEE1 subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with CDC2-CCNB1 complex. Can also interact with PIN1 when phosphorylated by CDC2-CCNB1.,

Research Area

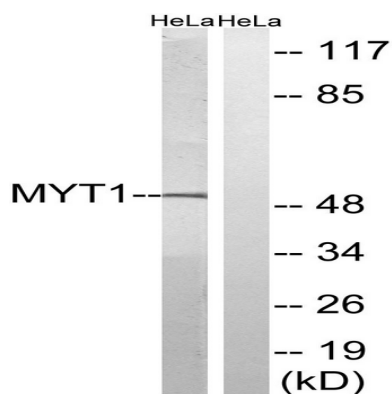
Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;Progesterone-mediated oocyte maturation;

Image Data

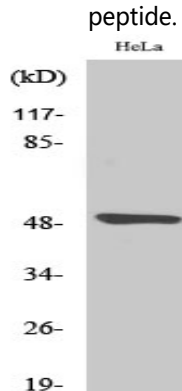


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MYT1 Antibody. The picture on the right is blocked with the synthesized peptide.

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Western blot analysis of lysates from HeLa cells, using MYT1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Myt 1 Polyclonal Antibody diluted at 1: 2000

Note

For research use only.