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

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Rat,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	50kDa

**Antigen Information**

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

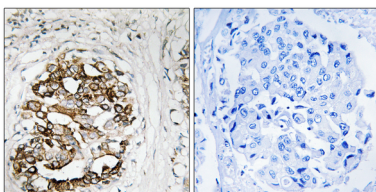
**Background**

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.,

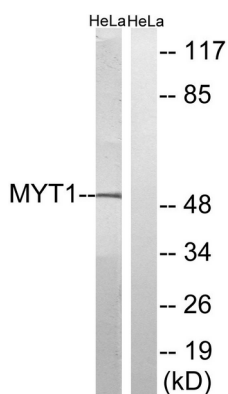
## Research Area

Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;Oocyte meiosis;Progesterone-mediated oocyte maturation;

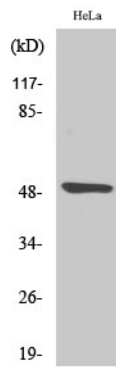
## Image Data



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



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