
Product Name: Myt 1 (phospho Ser83) Rabbit Polyclonal Antibody**Catalog #: APRab05061**

For research use only.

Summary

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

Application

Dilution Ratio IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000

Molecular Weight

Antigen Information

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
Immunogen	The antiserum was produced against synthesized peptide derived from human MYT1 around the phosphorylation site of Ser83. AA range:49-98

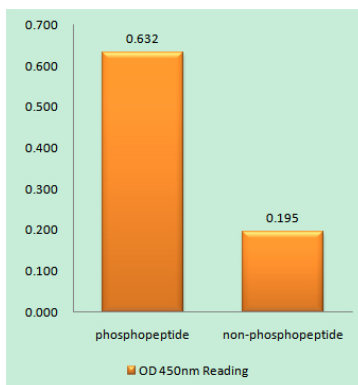
Background

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.,

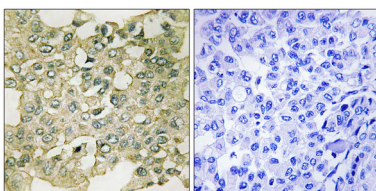
Research Area

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

Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using MYT1 (Phospho-Ser83) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MYT1 (Phospho-Ser83) Antibody. The picture on the right is blocked with the phospho peptide.