

## (Mouse) Melk Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21284c

### Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q61846</a>
<b>Reactivity</b>	Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB51207
<b>Calculated MW</b>	72729

### Additional Information

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<b>Gene ID</b>	17279
<b>Other Names</b>	Maternal embryonic leucine zipper kinase, Protein kinase PK38, mPK38, Tyrosine-protein kinase MELK, Melk, Kiaa0175, Pk38
<b>Target/Specificity</b>	This Mouse Melk antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 381-415 amino acids from the Central region of Mouse Melk.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	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.
<b>Precautions</b>	(Mouse) Melk Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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<b>Name</b>	Melk
<b>Synonyms</b>	Kiaa0175, Pk38
<b>Function</b>	Serine/threonine-protein kinase involved in various processes such as cell cycle regulation, self-renewal of stem cells, apoptosis and splicing regulation. Has a broad substrate specificity; phosphorylates BCL2L14, CDC25B,

MAP3K5/ASK1 and ZNF622. Acts as an activator of apoptosis by phosphorylating and activating MAP3K5/ASK1. Acts as a regulator of cell cycle, notably by mediating phosphorylation of CDC25B, promoting localization of CDC25B to the centrosome and the spindle poles during mitosis. Plays a key role in cell proliferation. Required for proliferation of embryonic and postnatal multipotent neural progenitors. Phosphorylates and inhibits BCL2L14. Also involved in the inhibition of spliceosome assembly during mitosis by phosphorylating ZNF622, thereby contributing to its redirection to the nucleus. May also play a role in primitive hematopoiesis.

**Cellular Location**

Cell membrane; Peripheral membrane protein

**Tissue Location**

Expressed in testis, ovary, thymus, spleen and T- cell. Expressed by neural progenitors: highly enriched in cultures containing multipotent progenitors.

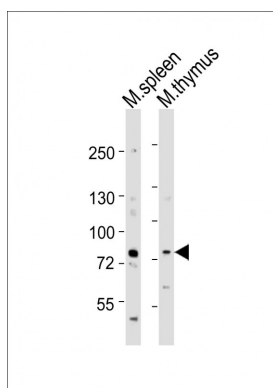
## Background

Serine/threonine-protein kinase involved in various processes such as cell cycle regulation, self-renewal of stem cells, apoptosis and splicing regulation. Has a broad substrate specificity; phosphorylates BCL2L14, CDC25B, MAP3K5/ASK1 and ZNF622. Acts as an activator of apoptosis by phosphorylating and activating MAP3K5/ASK1. Acts as a regulator of cell cycle, notably by mediating phosphorylation of CDC25B, promoting localization of CDC25B to the centrosome and the spindle poles during mitosis. Plays a key role in cell proliferation. Required for proliferation of embryonic and postnatal multipotent neural progenitors. Phosphorylates and inhibits BCL2L14. Also involved in the inhibition of spliceosome assembly during mitosis by phosphorylating ZNF622, thereby contributing to its redirection to the nucleus. May also play a role in primitive hematopoiesis.

## References

Gil M.,et al.Gene 195:295-301(1997).  
Heyer B.S.,et al.Mol. Reprod. Dev. 47:148-156(1997).  
Carninci P.,et al.Science 309:1559-1563(2005).  
Okazaki N.,et al.DNA Res. 10:167-180(2003).  
Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).

## Images



All lanes : Anti-Melk Antibody (Center) at 1:1000 dilution  
Lane 1: mouse spleen lysates Lane 2: mouse thymus lysates  
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution  
Predicted band size : 73 kDa  
Blocking/Dilution buffer: 5% NFDM/TBST.

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