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# MELK Antibody (C-term)
**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP7149B**

## Specification

### MELK Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | Q14680 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **525-554** |

### MELK Antibody (C-term) - Additional Information

**Gene ID** 9833

**Other Names**
Maternal embryonic leucine zipper kinase, hMELK, Protein kinase Eg3, pEg3 kinase, Protein kinase PK38, hPK38, Tyrosine-protein kinase MELK, MELK, KIAA0175

**Target/Specificity**
This MELK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 525-554 amino acids from the C-terminal region of human MELK.

**Dilution**
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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**
MELK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### MELK Antibody (C-term) - Protein Information

**Name** MELK

**Synonyms** KIAA0175

**Function** 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 and carcinogenesis. Required for proliferation of embryonic and postnatal multipotent neural progenitors. Phosphorylates and inhibits BCL2L14, possibly leading to affect mammary carcinogenesis by mediating inhibition of the pro-apoptotic function of 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

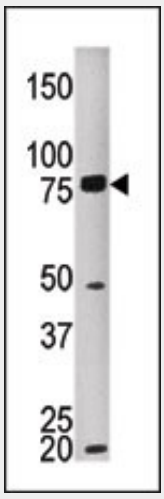
**Tissue Location**
Expressed in placenta, kidney, thymus, testis, ovary and intestine.

## MELK Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## MELK Antibody (C-term) - Images




The anti-MELK Pab (Cat. #AP7149b) is used in Western blot to detect MKEL in HEPG2 tissue lysate

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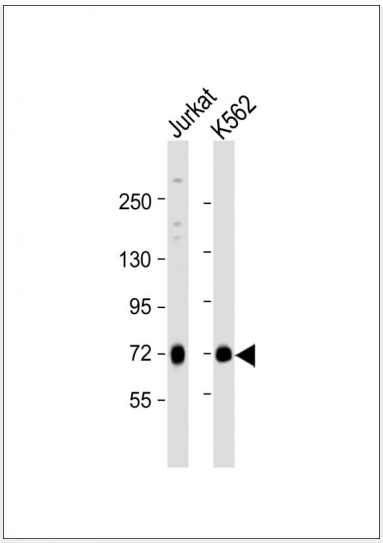


All lanes : Anti-MELK Antibody C-term at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 75 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

**MELK Antibody (C-term) - Background**

MELK Contains 1 protein kinase domain that Belongs to the Ser/Thr protein kinase family. It phosphorylates ZNF622 and may contribute to its redirection to the nucleus. MELK may also be involved in the inhibition of spliceosome assembly during mitosis.

**MELK Antibody (C-term) - References**

Davezac, N., et al., Oncogene 21(50):7630-7641 (2002).
Heyer, B.S., et al., Mol. Reprod. Dev. 47(2):148-156 (1997).