

MELK Antibody

Rabbit mAb Catalog # AP91648

Specification

MELK Antibody - Product Information

| Application Primary Accession Clonality Other Names hMELK; hPK38; MELK; mKIAA0175; MPK38; | WB <u>014680</u> Monoclonal |
|--|-----------------------------------|
| Isotype Host Calculated MW | Rabbit IgG Rabbit 74642 Da |
| MELK Antibody - Additional Information | |
| Dilution | WB~~1:1000 |

Dilution WB~~1:1000 Purification Affinity-chromatography A synthesized peptide derived from human Immunogen **MELK** Description Phosphorylates ZNF622 and may contribute to its redirection to the nucleus. May be involved in the inhibition of spliceosome assembly during mitosis. Rabbit IgG in phosphate buffered saline, Storage Condition and Buffer pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

MELK Antibody - 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 - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MELK Antibody - Images



Western blot analysis of MELK expression in K562 cell lysate.