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MELK Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7149b

Specification

MELK Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q14680

MELK Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody <a >AP7149b was selected from the C-term region of human MELK. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MELK Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

MELK Antibody (C-term) Blocking Peptide - Images

MELK Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

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