

MELK Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7149a**Specification****MELK Antibody (Center) Blocking Peptide -
Product Information**Primary Accession [Q14680](#)**MELK Antibody (Center) 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 [AP7149a](#) was selected from the Center 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 (Center) Blocking Peptide -
Protein Information****MELK Antibody (Center) 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 (Center) 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).

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 (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)