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(Mouse) Melk Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP21213b

Specification

(Mouse) Melk Blocking Peptide (C-term) - Product Information

Primary Accession Q61846

(Mouse) Melk Blocking Peptide (C-term) - Additional Information

Gene ID 17279

Other Names
Maternal embryonic leucine zipper kinase, Protein kinase PK38, mPK38, Tyrosine-protein kinase MELK, Melk, Kiaa0175, Pk38

Target/Specificity
The synthetic peptide sequence is selected from aa 434-448 of HUMAN Melk

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.

(Mouse) Melk Blocking Peptide (C-term) - Protein Information

Name Melk

Synonyms Kiaa0175, Pk38

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. 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.

(Mouse) Melk Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

(Mouse) Melk Blocking Peptide (C-term) - Images

(Mouse) Melk Blocking Peptide (C-term) - Background

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(Mouse) Melk Blocking Peptide (C-term) - 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).