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MELK Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7149B

Product Information

Application	WB, E
Primary Accession	Q14680
Reactivity	Human
Predicted	Mouse, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB8557
Calculated MW	74642
Antigen Region	525-554

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.

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.

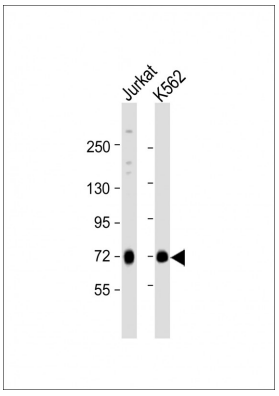
Background

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.

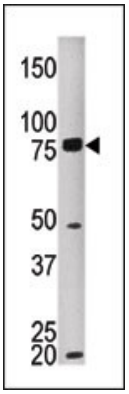
References

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

Images



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.



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.