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MELK Antibody

Rabbit mAb
Catalog # AP91648

Product Information

Application	WB
Primary Accession	Q14680
Reactivity	Human
Clonality	Monoclonal
Other Names	hMELK; hPK38; MELK; mKIAA0175; MPK38;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	74642

Additional Information

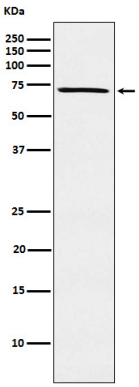
Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human MELK
Description	Phosphorylates ZNF622 and may contribute to its redirection to the nucleus. May be involved in the inhibition of spliceosome assembly during mitosis.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , 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.

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.

Images



Western blot analysis of MELK expression in K562 cell lysate.

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