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KD-Validated Anti-MELK Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1341

Product Information

Application	WB, FC, ICC
Primary Accession	Q14680
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB3005
Calculated MW	74642
Gene Name	MELK
Aliases	MELK; Maternal Embryonic Leucine Zipper Kinase; KIAA0175; Tyrosine-Protein Kinase MELK; Protein Kinase PK38; Protein Kinase Eg3; PEg3 Kinase; EC 2.7.11.1; HPK38; EC 2.7.10.2; EC 2.7.11; HMELK
Immunogen	A synthesized peptide derived from human MELK

Additional Information

Gene ID	9833
Other Names	Maternal embryonic leucine zipper kinase, hMELK, 2.7.11.1, Protein kinase Eg3, pEg3 kinase, Protein kinase PK38, hPK38, Tyrosine-protein kinase MELK, 2.7.10.2, MELK, KIAA0175

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.

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