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Goat Anti-MELK Antibody

Peptide-affinity purified goat antibody
Catalog # AF1668a

Specification

Goat Anti-MELK Antibody - Product Information

Application	**WB, E**
Primary Accession	Q14680
Other Accession	NP_055606, 9833
Reactivity	**Human**
Predicted	**Mouse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**74642**

Goat Anti-MELK Antibody - 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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-MELK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-MELK Antibody - 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.

Goat Anti-MELK Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-MELK Antibody - Images

AF1668a (0.1 µg/ml) staining of human testis lysate (RIPA buffer, 1.4E5 cells per lane). Detected by western blot using chemiluminescence.

Goat Anti-MELK Antibody - References

Dysregulated expression of Fau and MELK is associated with poor prognosis in breast cancer. Pickard MR, et al. Breast Cancer Res, 2009. PMID 19671159.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Maternal embryonic leucine zipper kinase transcript abundance correlates with malignancy grade in human astrocytomas. Marie SK, et al. Int J Cancer, 2008 Feb 15. PMID 17960622.
Maternal embryonic leucine zipper kinase is a key regulator of the proliferation of malignant brain tumors, including brain tumor stem cells. Nakano I, et al. J Neurosci Res, 2008 Jan. PMID 17722061.
Involvement of maternal embryonic leucine zipper kinase (MELK) in mammary carcinogenesis through interaction with Bcl-G, a pro-apoptotic member of the Bcl-2 family. Lin ML, et al. Breast Cancer Res, 2007. PMID 17280616.