

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MELK in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MELK Gln341-Ala470 Accession # Q14680
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

MELK (maternal embryonic leucine zipper kinase; also HPK38) is a member of the Snf1/AMPK family of serine/threonine kinases. It is expressed in blood mononuclear cells, stem cells and other tissues, and functions in cell cycle progression and pre-mRNA splicing. Human MELK is 651 amino acids (aa) in length and contains one protein kinase domain (aa 11-263) and a kinase-associated (KA) 1 domain (aa 602-651). MELK is activated upon phosphorylation of T167 and S171. There are multiple alternative splice variants. Two show the same 16 aa substitution for the N-terminal 87 and 48 aa, respectively; a third shows an alternate start site at M440, and a fourth shows complex splicing over aa 1-392. Over aa 341-470, human MELK shares 56% aa identity with mouse MELK.

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