

Product datasheet for **TP762534**

MELK (NM_014791) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human maternal embryonic leucine zipper kinase (MELK), 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding the region full length of MELK
Tag:	N-GST and C-HIS
Predicted MW:	74.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50mM Tris, pH8.0, 8M Urea
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_055606
Locus ID:	9833
UniProt ID:	Q14680
RefSeq Size:	2486
Cytogenetics:	9p13.2
RefSeq ORF:	1953
Synonyms:	HPK38



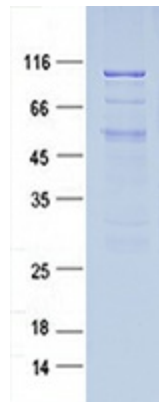
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Summary:

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.[UniProtKB/Swiss-Prot Function]

Protein Families:

Druggable Genome, Protein Kinase

Product images:

Coomassie blue staining of purified MELK protein (Cat #TP762534). The protein was produced from E.coli.