

## Product datasheet for **TP306122M**

### **MCM4 (NM\_182746) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human minichromosome maintenance complex component 4 (MCM4), transcript variant 2, 100 µg
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293T
<b>Expression cDNA Clone or AA Sequence:</b>	>RC206122 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MSSPASTPSRRGSRRGRATPAQTPRSEDARSSPSQRRRGEDSTSTGELQPMPTSPGVDLQSPAAQDVLFS  
SPPQMHSSAIPDLDFDVSSPLTYGTPSSRVEGTPRSGVRGTPVRQRPDLGSAQKGLQVDLQSDGAAEDIV  
ASEQSLGQKLVIWGTVDVNVAACKENFQRFQRFIDPLAKEEENVGIDITEPLYMQRLGEINVIGEPFLNV  
NCEHIKSFDKNLRYQLISYPQEVPTFDMAVNEIFFDRYPDSILEHQIQRPFNALKTKNMRNLNPEDID  
QLITISGMVIRTSQLIPEMQEAFFQCQVCAHTTRVEMDRGRIAEPSVCGRCHTTTHSMALIHNRSLFSDKQ  
MIKLQESPEDMPAGQTPHTVILFAHNDLVQVQPGDRVNVGTGIYRAVPIRVNPRVSNVKSVMYKTHIDVIH  
YRKTDKRLHGLDEEAEQKLFSEKRVELLKELSRKPDYERLASALAPSIYEHEDIKKGILLQLFGGTRK  
DFSHTGRGKFRAEINILLCGDPGTSKSQLQYVYNLVPRGQYTSKGKSSAVGLTAYVMKDPETRQLVLQT  
GALVLSDNIGICIDEFDKMNESTRSVLHEVMEQQTLIAKAGIICQLNARTSVLAAANPIESQWNPCKTT  
IENIQLPHTLLSRFDLIFLMLDPQDEAYDRRLAHLVALYYQSEEQAEELLDMAVLKDYIAYAHSTIMP  
RLSEESQALIEAYVDMRKIGSSRGMVSAYPRQLESRLAEAHAKVRLSNKVEAIDVEEAKRLHREALK  
QSATDPRTGIVDISILTTGMSATSRKRKEELAEALKKILSKGKTPALKYQQLFEDIRGQSDIAITKDMF  
EEALRALADDDFLTGTGKTVRL

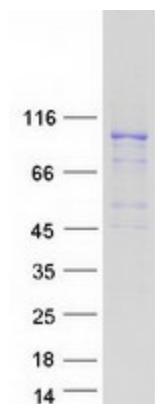
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	96.4 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_877423</a>
<b>Locus ID:</b>	4173
<b>UniProt ID:</b>	<a href="#">P33991</a>
<b>RefSeq Size:</b>	4800
<b>Cytogenetics:</b>	8q11.21
<b>RefSeq ORF:</b>	2589
<b>Synonyms:</b>	CDC21; CDC54; hCdc21; IMD54; NKCD; NKGCD; P1-CDC21
<b>Summary:</b>	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. The MCM complex consisting of this protein and MCM2, 6 and 7 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. The phosphorylation of this protein by CDC2 kinase reduces the DNA helicase activity and chromatin binding of the MCM complex. This gene is mapped to a region on the chromosome 8 head-to-head next to the PRKDC/DNA-PK, a DNA-activated protein kinase involved in the repair of DNA double-strand breaks. Alternatively spliced transcript variants encoding the same protein have been reported. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Stem cell - Pluripotency, Transcription Factors
<b>Protein Pathways:</b>	Cell cycle, DNA replication

**Product images:**

Coomassie blue staining of purified MCM4 protein (Cat# [TP306122]). The protein was produced from HEK293T cells transfected with MCM4 cDNA clone (Cat# [RC206122]) using MegaTran 2.0 (Cat# [TT210002]).