

## Product datasheet for TP312292

### MCM4 (NM\_005914) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human minichromosome maintenance complex component 4 (MCM4), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC212292 representing NM_005914 Red=Cloning site Green=Tags(s)

MSSPASTPSRRGSRGRATPAQTPRESDARSSPSQRRRGEDSTSTGELQPMPTSPGVLDLQSPAAQDVLFS  
SPPQMHSIAIPLDFDVSSPLTYGTPSSRVEGTPRSQVGRGTPVRQRPDLGSAQKGLQVDLQSDGAAAEDIV  
ASEQSLGQKLVWGTVDNVAACKENFQRFLQRFLDPLAKEEENVGIDITEPLYMQRLGEINVIGEPFLNV  
NCEHIKSFDKNLYRQLISYPQEVIPFDMAVNEIFFDRYPDSILEHQIQVRPFNALKTKNMRNLNPEDID  
QLITISGMVIRTSQLIPEMQEAFQCQVCAHTTRVEMDRGRIAEPSVCGRCHTTHSMALIHNRSLFSDKQ  
MIKLQESPEDMPAGQTPHTVILFAHNDLVKQVQGDVNVGTGIYRAVPIRVNPRVSNVKSVMYKTHIDVIH  
YRKTDAKRLHGLDEEAEQKLFSEKRVLLKELSRKPIYERLASALAPSIYEHEDIKKGILLQLFGGTRK  
DFSHTGRGKFRAEINILLCGDPGTSKSQLLYVYNLVPRGQYTSQKSSAVGLTAYVMKDPETRQLVLQQT  
GALVLSDNIGICCIDFDKMNSTRSVLHEVMEQQTLSIAKAGIICQLNARTSVLAAANPIESQWNPCKTT  
IENIQLPHTLLSRFDLIFLMLDPQDEAYDRRLAHLVALYYQSEEQAEELLDMAVLKDYIAYAHSTIMP  
RLSEEASQALIEAYVDMRKIGSSRGMVSAYPRQLESIRLAEAHAKVRLSNKVEAIDVEEAKRLHREALK  
QSATDPRTGIVDISILTTGMSATSRKRKEELAEALKLILSKGKTPALKYQQLFEDIRGQSDIAITKDMF  
EEALRALADDDFLTGTGKTVRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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



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**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_005905](#)

**Locus ID:** 4173

**UniProt ID:** [P33991](#), [B4DLA6](#)

**RefSeq Size:** 3533

**Cytogenetics:** 8q11.21

**RefSeq ORF:** 2589

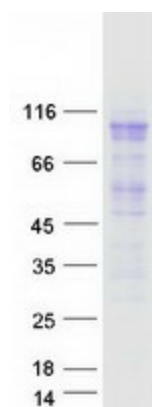
**Synonyms:** CDC21; CDC54; hCdc21; IMD54; NKCD; NKGCD; P1-CDC21

**Summary:** 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]

**Protein Families:** Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:** Cell cycle, DNA replication

### Product images:



Coomassie blue staining of purified MCM4 protein (Cat# TP312292). The protein was produced from HEK293T cells transfected with MCM4 cDNA clone (Cat# [RC212292]) using MegaTran 2.0 (Cat# [TT210002]).