

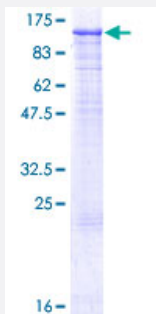
Full-Length

MCM4 (Human) Recombinant Protein (P01)

Catalog # H00004173-P01

Size 10 ug, 25 ug

Applications



Specification

Product Description

Human MCM4 full-length ORF (AAH31061.1, 1 a.a. - 863 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSSPASTPSRRGSRRGRATPAQTPRSEDARSSPSQRRRGEDSTSTGELQPMPTSPGVDLQSP
AAQDVLFFSPPQMHSAPLDFDVSSPLTYGTPSSRVEGTPRSGVRGTPVRQRPDLGSAQKGLQ
VDLQSDGAAAEDIVASEQSLGQKLVWGTDVNVAACKENFQRFLQRFIDPLAKEEENVGIDITEPL
YMQRLGEINVIGEPFLNVNCEHIKSFDKNLYRQLISYPQEVIPTFDMAVNEIFFDRYPDSILEHQIQR
PFNALKTKNMRNLNPEDIDQLITISGMVIRTSQLIPEMQEAFQCQVCAHTTRVEMDRGRIAEPSVC
GRCHTTHSMALIHNRSLFSDKQMIKLQESPEDMPAGQTPHTVILFAHNDLVDKVQPGDRVNVGTGIY
RAVPIRVNPRVSNVKSVMYKTHIDVIHYRKTDARLHGLDEEAEQKLFSEKRVELLKELSRKPDYER
LASALAPSIYEHEDIKKGILLQLFGGTRKDFSHTGRGKFRAEINILLCGDPGTSKSQLQVYNLVPR
GQYTSKGSSAVGLTAYVMKDPETRQLVLQTGALVLSDNIGCCIDEFDKMNESTRSVLHEVMEQ
QTLIAKAGIICQLNARTSVLAAANPIESQWNPCKTTIENIQLPHTLLSRFDLIFLMLDPQDEAYDRRL
AHHLVALYYQSEEQAEELLDMAVLKDYIAHASTIMPRLSEEASQALIEAYVDMRKIGSSRGMVS
AYPRQLESRLRLAEAHAKVRLSNKVEAIDVEEAKRLHREALKQSATDPRTGVDISILTTGMSATSRK
RKEELAEALKKLILSKGKTPALKYQQLFEDIRGQSDAITKDMFEEALRALADDDFLTVTGKTVRL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

123

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MCM4

Entrez GeneID	4173
GeneBank Accession#	BC031061.1
Protein Accession#	AAH31061.1
Gene Name	MCM4
Gene Alias	CDC21, CDC54, MGC33310, P1-CDC21, hCdc21
Gene Description	minichromosome maintenance complex component 4
Omim ID	602638
Gene Ontology	Hyperlink

Gene 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]

Other Designations

DNA replication licensing factor MCM4|MCM4 minichromosome maintenance deficient 4|homolog of S. pombe cell division cycle 21|minichromosome maintenance deficient 4

Publication Reference

- [The selection and characterization of antibodies to minichromosome maintenance proteins that highlight cervical dysplasia.](#)

Henderson D, Hall L, Prpic N, Hessling J, Parker M, Sampson S, Simkins S, Brough G, Dixon E, Lenz K, Knapp S, Murphy P, Taylor A, Fischer T, Malinowski DP.

J Immunol Methods 2011 May; 370:1.

Application: WB, Recombinant protein

Pathway

- [Cell cycle](#)
- [DNA replication](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Hematologic Diseases](#)
- [Occupational Diseases](#)