

Datasheet for ABIN7563647 MCM9 Protein (AA 1-1134) (His tag)



Overview

Quantity:	1 mg
Target:	MCM9
Protein Characteristics:	AA 1-1134
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MCM9 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Mcm9 Protein expressed in mammalien cells.
Sequence:	MNSEQVTLVG QVFESYVSEY HKNDILLILK ERDEDAHYPV VVNAMSLFET NMEIGDYFTV
	FPNEVLTVFD SALRRSALAI LQSLPETEGL SMKQNLHARI SGLPVCPELV REHIPKTKDV
	GHFLSVTGTV IRTSLVKVLE FERDYMCNKC KHVFMVEADF EQYYTFSRPS SCPSLASCDS
	SKFSCLSDLS SSPARCRDYQ EIKIQEQVQR LSVGSIPRSM KVILEDDLVD SCKSGDDLTI
	YGVVMQRWKP FQRDVRCEVE IVLKANYVQV NNEQSSGMVM DEDTRKEFED FWEHYKSDPF
	AGRNEILASL CPQVFGMYLV KLAVAMVLAG GIQRTDAAGT RVRGESHLLL VGDPGTGKSQ
	FLKYAAKITP RSVLTTGIGS TSAGLTVTAV KDSGEWNLEA GALVLADAGL CCIDEFNSLK
	EHDRTSIHEA MEQQTISVAK AGLVCKLNTR TTILAATNPK GQYDPKESVS VNIALGSPLL
	SRFDLVLVLL DTRNEDWDRI ISSFILENKG YPSKSENLWS MEKMKTYFCL IRNLHPTLSE
	VSNQVLLRYY QMQRQSDSRN AARTTIRLLE SLIRLAEAHA RLMFRSAVTL EDAVTAVSVM
	ESSMQGGALL GGVNALHTSF PENPRAQYQR QCELILEKLE LQGLLQEELR RLERLQNESV

HQCQSHSLEE EVAPGSCRND PRDKPRLRTS TQQEQSCSWS STERSGADSP PGPGLNRPTS
CNNSAENRDG RGDGLDWLDP TSSPEIAPES TIVSPNVKTT EKNVNLKISN NKSQGKEKHG
PQQRSKLLEA GHLPSSGAMN APLRSHGVKR TKASQAVVVS EAGRGDEEDS VPRRLPKLLK
EGSQNVCRST TRVRPLPPTV PLSLSIPSPG SGKRSGTPKR KRRKSAQVEE PEPEGMETPT
VKLAKFTFKQ KTKLTHSPEG QGPIPPSASE IAVDSSKIPQ QRTRREAAVP VVAPGKSTST
SGDRCSDQLH GKTKELSRQP PDSNPPREER EQGPKRRVIQ PKPELGNQAG HSHLACEKDR
KEGVSCGNKS SKVHAGTIAR LASFSFTSPS ESKSESLPPE RKDSRDSRDS RDSRDRCHSP
PATTAPVLGQ QRQTFQLQQP TERANLSTLS LFTLSELDDE ALDFDWEEEM RKKP Sequence
without tag. The proposed Purification-Tag is based on experiences with the expression
system, a different complexity of the protein could make another tag necessary. In case you
have a special request, please contact us.

Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:	MCM9
Alternative Name:	Mcm9 (MCM9 Products)
Background:	DNA helicase MCM9 (EC 3.6.4.12) (Mini-chromosome maintenance deficient domain-
	containing protein 1) (Minichromosome maintenance 9),FUNCTION: Component of the MCM8-

MCM9 complex, a complex involved in the repair of double-stranded DNA breaks (DBSs) and DNA interstrand cross-links (ICLs) by homologous recombination (HR) (PubMed:23401855, PubMed:22771120). Required for DNA resection by the MRE11-RAD50-NBN/NBS1 (MRN) complex at double-stranded DNA breaks to generate ssDNA by recruiting the MRN complex to the repair site and by promoting the complex nuclease activity (By similarity). Probably by regulating the localization of the MNR complex, indirectly regulates the recruitment of downstream effector RAD51 to DNA damage sites including DBSs and ICLs (PubMed:22771120, PubMed:23401855). Acts as a helicase in DNA mismatch repair (MMR) following DNA replication errors to unwind the mismatch containing DNA strand (PubMed:22771120, PubMed:26300262). In addition, recruits MLH1, a component of the MMR complex, to chromatin (By similarity). The MCM8-MCM9 complex is dispensable for DNA replication and S phase progression (PubMed:21987787). Probably by regulating HR, plays a key role during gametogenesis (PubMed:21987787, PubMed:22771120). {ECO:0000250|UniProtKB:Q9NXL9, ECO:0000269|PubMed:21987787, ECO:0000269|PubMed:22771120, ECO:0000269|PubMed:23401855, ECO:0000269|PubMed:26300262}.

Molecular Weight: 125.8 kDa

02KHI9

Application Details

UniProt:

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

as well. As the protein has not been tested for functional studies yet we cannot offer a

guarantee though.

Restrictions: For Research Use only

Handling

Format:

Buffer:
The buffer composition is at the discretion of the manufacturer.

Handling Advice:
Avoid repeated freeze-thaw cycles.

Storage:
-80 °C

Storage Comment:
Store at -80°C.

Expiry Date:
12 months