

Datasheet for ABIN3093865

## MMS22-Like, DNA Repair Protein (MMS22L) (AA 1-1243) protein (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	MMS22-Like, DNA Repair Protein (MMS22L)
Protein Characteristics:	AA 1-1243
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MENCSAASTF LTDSLELELG TEWCKPPYFS CAVDNRRGGGK HFSGESYLCS GALKRLILNL</p> <p>DPLPTNFEED TLEIFGIQWV TETALVNSSR ELFHLFRQQL YNLETLLQSS CDFGKVSTLH</p> <p>CKADNIRQQC VLFLHYVKVF IFRYLKVQNA ESHVPVHPYE ALEAQLPSVL IDELHGLLLY</p> <p>IGHLSELPVS NIGAFVNQNN IKLFPPSWHL LHLHLDIHWL VLEILYMLGE KKKQVYVGHQ</p> <p>FMNLASDNLT NISLFEEHCE TLLCDLISLS LNRYDKVRSS ESLMSDQCPC LCIKELWVLL</p> <p>IHLLDHRSKW FVSEFWNWL NKLLKTLEK SSDRRRSSMP VIQSRDPLGF SWWIITHVAS</p> <p>FYKFDRHGVP DEMRKVESNW NFVEELLKKS ISVQGVILEE QLRMYLHCCL TLCDFWEPNI</p> <p>AIVTILWEYY SKNLNSSFSI SWLPFKGLAN TMKSPLSMLE MVKTCCCDKQ DQELYKSSSS</p> <p>YTIFLCILAK VVKKAMKSNG PHPWKQVKGR IYSKFHQKRM EELTEVGLQN FFSLFLLAA</p> <p>VAEVEDVASH VLDLLNFLKP AFVTSQRALI WKGHMAFLLM YAKKNLDIGV LAEKFSACFR</p> <p>EKAKEFLVSK NEEMVQRQTI WTLLSIYIDG VQEVFETSYC LYPSEKLLN DGFSMLLRAC</p>

RESELRTVLS FLQAVLARIR SMHQQLCQEL QRDNVDLFVQ SSSLAKERHL AAVASALWRH  
FFSFLKSQRM SQVVPFSQLA DAAADFTLLA MDMPSTAPSD FQPQPVISII QLFGWDDIIC  
PQVVARYLSH VLQNSTLCEA LSHSGYVSFQ ALTVRSWIRC VLQMYIKNLS GPDDLLIDKN  
LEEAVEKEYM KQLVKLTRLL FNLSEVKSIF SKAQVEYLSI SEDPKKALVR FFEAVGVTYG  
NVQTLSDKSA MVTKSLEYLG EVLKYIKPYL GKKVFSAGLQ LTYGMMGILV KSWAQIFATS  
KAQKLLFRII DCLLLPHAVL QQEKELPAPM LSAIQKSLPL YLQGMCI VCC QSQNP NAYLN  
QLLGNVIEQY IGRFLPASPY VSDLGQHPVL LALRNTATIP PISSLKKCIV QVIRKSYLEY  
KGSSPPPRLA SILAFILQLF KETNTDIYEV ELLPGILKC LVLVSEPQVK RLATENLQYM  
VKACQVGSEE EPSSQLTSVF RQFIQDYGMR YYYQVYSILE TVATLDQQVV IHLISTLTQS  
LKDSEQKWGL GRNIAQREAY SKLLSHLGQM GQDEMQRLEN DNT

**Sequence without tag. The proposed Strep-Tag is based on experience s 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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	MMS22-Like, DNA Repair Protein (MMS22L)
Alternative Name:	MMS22L ( <a href="#">MMS22L Products</a> )
Background:	<p>Protein MMS22-like (Methyl methanesulfonate-sensitivity protein 22-like),FUNCTION: Component of the MMS22L-TONSL complex, a complex that promotes homologous recombination-mediated repair of double-strand breaks (DSBs) at stalled or collapsed replication forks (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:21113133, PubMed:26527279, PubMed:27338793, PubMed:29478807). The MMS22L-TONSL complex is required to maintain genome integrity during DNA replication (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:27797818). It mediates the assembly of RAD51 filaments on single-stranded DNA (ssDNA): the MMS22L-TONSL complex is recruited to DSBs following histone replacement by histone chaperones and eviction of the replication protein A complex (RPA/RP-A) from DSBs (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:29478807). Following recruitment to DSBs, the TONSL-MMS22L complex promotes recruitment of RAD51 filaments and subsequent homologous recombination (PubMed:27797818, PubMed:29478807). Within the complex, MMS22L acts by binding ssDNA (PubMed:27797818). {ECO:0000269 PubMed:21055983, ECO:0000269 PubMed:21055984, ECO:0000269 PubMed:21055985, ECO:0000269 PubMed:21113133, ECO:0000269 PubMed:26527279, ECO:0000269 PubMed:27338793, ECO:0000269 PubMed:27797818, ECO:0000269 PubMed:29478807}.</p>
Molecular Weight:	142.3 kDa

## Target Details

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UniProt: [Q6ZRQ5](#)

## Application Details

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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.

Comment: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.  
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months