

Datasheet for ABIN3136342

**MASTL Protein (AA 1-865) (His tag)****1** Image[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	MASTL
Protein Characteristics:	AA 1-865
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MASTL protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	MESASASEEN EGGAAIEECV SRIPVPRPPS IEEFTIVKPI SRGAFGKVYL GQKGGKLYAV KVVKKADMIN KNMTHQVQAE RDALALSKSP FVVHLYYSLQ SASNIYLIME YLIGGDVKSL LHIYGYFDEE MAIKYISEVA LALDYLHRHG IIHRDLKPDN MLISNEGHIK LTDFGLSKVT LNRDINMMDI LTPSMSKPK QDYSRTPGQV LSLISLGFF TPVGEKDQDS ANMFSAPKSA AQLSRGFICP MSVDQKEPTS YSSKLLKSCF ETLSSNPEIP VKCLTSNLLQ CRKRLGTSST SSQSHTFVSS VESECHSNPK WERDCQSTES SGCAMSWNAV EMLYAKSTSA IKTKTELELA LSPIHDSSAI PAAGSNQVTL PRKCFREISW EARDPDNENM TIDKGQSGFC QSSQRSVNSS ATSEEHLGKR NYKRNHFLVD SSPCQEIMQS KKNCTEYEAN KERQGCRANQ STGLTTEVQN LKLSGCESQQ LDYANKENIV TYLTDRQTPE KLHIPTIAKN LMSEDEDCE LSSKKDCLSS NSVCSDDEDRA LKTTCVSDSDS SFPGVSMMS SLEIQALEPD KSIRDYSFEE PNTEDLFVLP KCQENSLPQD DCHACIQDSS QVSAHPSKAP KALTSKINVV AFRSFNSHIN ASTNSEPSKI SITSLDAMDI SCDYSGSYPM AVSPTEKGRH YTSHQTPNQV KLGTSYRTPK SVRRGAAPVD
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DGRILGTPDY LAPELLLGTA HGPVDWWAL GVCLFEFLTG IPPFNDETPQ QVFQNILKRD  
IPWPEGEEKL SDNAQSAMD LTTIDDSKRA GMRELKQHPL FSEVDWENLQ HQTMPFVPQP  
DDETDSYFE ARNNAQHLLTI SGFSL

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Mastl Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

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### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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### Sterility:

0.22 µm filtered

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## Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target: MASTL

Alternative Name: Mastl ([MASTL Products](#))

Background: Serine/threonine kinase that plays a key role in M phase by acting as a regulator of mitosis entry and maintenance. Acts by promoting the inactivation of protein phosphatase 2A (PP2A) during M phase: does not directly inhibit PP2A but acts by mediating phosphorylation and subsequent activation of ARPP19 and ENSA at 'Ser-62' and 'Ser-67', respectively. ARPP19 and ENSA are phosphatase inhibitors that specifically inhibit the PPP2R2D (PR55-delta) subunit of PP2A. Inactivation of PP2A during M phase is essential to keep cyclin-B1-CDK1 activity high. Following DNA damage, it is also involved in checkpoint recovery by being inhibited (By similarity). {ECO:0000250, ECO:0000269|PubMed:21156286}.

Molecular Weight: 96.9 kDa Including tag.

UniProt: [Q8C0P0](#)

## Application Details

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: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

## Handling

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Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

## Images

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**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process