

Datasheet for ABIN3092865

MASTL Protein (AA 1-879) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	MASTL
Protein Characteristics:	AA 1-879
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MASTL protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AlIcE®
Sequence:	<p>MDPTAGSKKE PGGGAATEEG VNRIAVPKPP SIEEFSIVKP ISRGAFGKVY LGQKGGKLYA</p> <p>VKVVKKADMI NKNMTHQVQA ERDALALSKS PFIVHLYYSL QSANNVYLM EYLIGGDVKS</p> <p>LLHIYGYFDE EMAVKYISEV ALALDYLHRH GIIHRDLKPD NMLISNEGHI KLTDGFLSKV</p> <p>TLNRDINMMD ILTTPSMAKP RQDYSRTPGQ VLSLISSLGF NTPIAEKNQD PANILSACLS</p> <p>ETSQLSQGLV CPMSVDQKDT TPYSSKLLKS CLETVASNPG MPVKCLTSNL LQSRKRLATS</p> <p>SASSQSHTFI SSVSECHSS PKWEKDCQES DEALGPTMMS WNAVEKLCAK SANAIETKGF</p> <p>NKKDLELALS PIHNSSALPT TGRSCVNLAK KCFSGEVSWE AVELDVNNIN MDTDTSQLGF</p> <p>HQSNQWAVDS GGISEEHLGK RSLKRNFEV DSSPCKKIIQ NKKTCEVEYKH NEMTNCYTNQ</p> <p>NTGLTVEVQD LKLSVHKSQQ NDCANKENIV NSFTDKQQT EKLPIPIAK NLMCELEDC</p> <p>EKNSKRDYLS SSFLCSDDDR ASKNISMNSD SSFPGISIME SPLESQPLDS DRSIKESSFE</p> <p>ESNIEDPLIV TPDCQEKTS KGVENPAVQE SNQKMLGPPL EVLKTASKR NAVAFRSFNS</p>

HINASNNSEP SRMNMTSLDA MDISCAYSGS YPMAITPTQK RRSCMPHQQT PNQIKSGTPY
RTPKSVRRGV APVDDGRILG TPDYLAPELL LGRAHGPAVD WWALGVCLFE FLTGIPIPFND
ETPQQVFQNI LKRDIPWPEG EEKLSDNAQS AVEILLTIDD TKRAGMKELK RHPLFSDVDW
ENLQHQTMPF IPQPDDTDT SYFEARNTAQ HLTVSGFSL

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.

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.

Product Details

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

Target:	MASTL
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Alternative Name:	MASTL (MASTL Products)
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Background:	<p>Serine/threonine-protein kinase greatwall (GW) (GWL) (hGWL) (EC 2.7.11.1) (Microtubule-associated serine/threonine-protein kinase-like) (MAST-L),FUNCTION: 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. Phosphorylates histone protein in vitro, however such activity is unsure in vivo. May be involved in megakaryocyte differentiation. {ECO:0000269 PubMed:12890928, ECO:0000269 PubMed:19680222, ECO:0000269 PubMed:19793917, ECO:0000269 PubMed:20538976, ECO:0000269 PubMed:20818157}.</p>
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Molecular Weight:	97.3 kDa
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UniProt:	Q96GX5
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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.
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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.
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Application Details

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

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