Datasheet for ABIN3092865

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

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Overview

Quantity:	1 mg
Target:	MASTL
Protein Characteristics:	AA 1-879
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MASTL protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MDPTAGSKKE PGGGAATEEG VNRIAVPKPP SIEEFSIVKP ISRGAFGKVY LGQKGGKLYA VKVVKKADMI NKNMTHQVQA ERDALALSKS PFIVHLYYSL QSANNVYLVM EYLIGGDVKS LLHIYGYFDE EMAVKYISEV ALALDYLHRH GIIHRDLKPD NMLISNEGHI KLTDFGLSKV TLNRDINMMD ILTTPSMAKP RQDYSRTPGQ VLSLISSLGF NTPIAEKNQD PANILSACLS ETSQLSQGLV CPMSVDQKDT TPYSSKLLKS CLETVASNPG MPVKCLTSNL LQSRKRLATS SASSQSHTFI SSVESECHSS PKWEKDCQES DEALGPTMMS WNAVEKLCAK SANAIETKGF NKKDLELALS PIHNSSALPT TGRSCVNLAK KCFSGEVSWE AVELDVNNIN MDTDTSQLGF HQSNQWAVDS GGISEEHLGK RSLKRNFELV DSSPCKKIIQ NKKTCVEYKH NEMTNCYTNQ NTGLTVEVQD LKLSVHKSQQ NDCANKENIV NSFTDKQQTP EKLPIPMIAK NLMCELDEDC EKNSKRDYLS SSFLCSDDDR ASKNISMNSD SSFPGISIME SPLESQPLDS DRSIKESSFE ESNIEDPLIV TPDCQEKTSP KGVENPAVQE SNQKMLGPPL EVLKTLASKR NAVAFRSFNS HINASNNSEP SRMNMTSLDA MDISCAYSGS YPMAITPTQK RRSCMPHQQT PNQIKSGTPY

RTPKSVRRGV APVDDGRILG TPDYLAPELL LGRAHGPAVD WWALGVCLFE FLTGIPPFND ETPQQVFQNI LKRDIPWPEG EEKLSDNAQS AVEILLTIDD TKRAGMKELK RHPLFSDVDW ENLQHQTMPF IPQPDDETDT 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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	MASTL
Alternative Name:	MASTL (MASTL Products)
Background:	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}.
Molecular Weight:	97.3 kDa
UniProt:	Q96GX5

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.

Application Details

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

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)