Datasheet for ABIN3096102

TTLL4 Protein (AA 1-1199) (Strep Tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	TTLL4
Protein Characteristics:	AA 1-1199
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TTLL4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MASAGTQHYS IGLRQKNSFK QSGPSGTVPA TPPEKPSEGR VWPQAHQQVK PIWKLEKKQV ETLSAGLGPG LLGVPPQPAY FFCPSTLCSS GTTAVIAGHS SSCYLHSLPD LFNSTLLYRR SSYRQKPYQQ LESFCLRSSP SEKSPFSLPQ KSLPVSLTAN KATSSMVFSM AQPMASSSTE PYLCLAAAGE NPSGKSLASA ISGKIPSPLS SSYKPMLNNN SFMWPNSTPV PLLQTTQGLK PVSPPKIQPV SWHHSGGTGD CAPQPVDHKV PKSIGTVPAD ASAHIALSTA SSHDTSTTSV ASSWYNRNNL AMRAEPLSCA LDDSSDSQDP TKEIRFTEAV RKLTARGFEK MPRQGCQLEQ SSFLNPSFQW NVLNRSRRWK PPAVNQQFPQ EDAGSVRRVL PGASDTLGLD NTVFCTKRIS IHLLASHASG LNHNPACESV IDSSAFGEGK APGPPFPQTL GIANVATRLS SIQLGQSEKE RPEEARELDS SDRDISSATD LQPDQAETED TEEELVDGLE DCCSRDENEE EEGDSECSSL SAVSPSESVA MISRSCMEIL TKPLSNHEKV VRPALIYSLF PNVPPTIYFG TRDERVEKLP WEQRKLLRWK MSTVTPNIVK QTIGRSHFKI SKRNDDWLGC WGHHMKSPSF RSIREHQKLN HFPGSFQIGR KDRLWRNLSR MQSRFGKKEF SFFPQSFILP QDAKLLRKAW ESSSRQKWIV

KPPASARGIG IQVIHKWSQL PKRRPLLVQR YLHKPYLISG SKFDLRIYVY VTSYDPLRIY LFSDGLVRFA SCKYSPSMKS LGNKFMHLTN YSVNKKNAEY QANADEMACQ GHKWALKALW NYLSQKGVNS DAIWEKIKDV VVKTIISSEP YVTSLLKMYV RRPYSCHELF GFDIMLDENL KPWVLEVNIS PSLHSSSPLD ISIKGQMIRD LLNLAGFVLP NAEDIISSPS SCSSSTTSLP TSPGDKCRMA PEHVTAQKMK KAYYLTQKIP DQDFYASVLD VLTPDDVRIL VEMEDEFSRR GQFERIFPSH ISSRYLRFFE QPRYFNILTT QWEQKYHGNK LKGVDLLRSW CYKGFHMGVV SDSAPVWSLP TSLLTISKDD VILNAFSKSE TSKLGKQSSC EVSLLLSEDG TTPKSKKTQA GLSPYPQKPS SSKDSEDTSK EPSLSTQTLP VIKCSGQTSR LSASSTFQSI SDSLLAVSP

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!

Product Details

	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.
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)
Grade:	Crystallography grade

Target Details

Target:	TTLL4
Alternative Name:	TTLL4 (TTLL4 Products)
Background:	Tubulin monoglutamylase TTLL4 (EC 6.3.2.-) (Protein monoglutamylase TTLL4) (Tubulin--tyrosine ligase-like protein 4),FUNCTION: Monoglutamylase which modifies both tubulin and non-tubulin proteins, adding a single glutamate on the gamma-carboxyl group of specific glutamate residues of target proteins. Involved in the side-chain initiation step of the polyglutamylation reaction but not in the elongation step. Preferentially modifies beta-tail tubulin over the alpha-tubulin. Monoglutamylates nucleosome assembly proteins NAP1L1 and NAP1L4. Monoglutamylates nucleotidyltransferase CGAS, leading to inhibition of CGAS catalytic activity, thereby preventing antiviral defense function. Involved in KLF4 glutamylation which impedes its ubiquitination, thereby leading to somatic cell reprogramming, pluripotency maintenance and embryogenesis. {ECO:0000250|UniProtKB:Q80UG8}.
Molecular Weight:	133.4 kDa
UniProt:	Q14679

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:	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)

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

