Datasheet for ABIN3096143

TTI1 Protein (AA 1-1089) (Strep Tag)

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1 Image

Overview

Quantity:	1 mg
Target:	TTI1
Protein Characteristics:	AA 1-1089
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TTI1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MAVFDTPEEA FGVLRPVCVQ LTKTQTVENV EHLQTRLQAV SDSALQELQQ YILFPLRFTL KTPGPKRERL IQSVVECLTF VLSSTCVKEQ ELLQELFSEL SACLYSPSSQ KPAAVSEELK LAVIQGLSTL MHSAYGDIIL TFYEPSILPR LGFAVSLLLG LAEQEKSKQI KIAALKCLQV LLLQCDCQDH PRSLDELEQK QLGDLFASFL PGISTALTRL ITGDFKQGHS IVVSSLKIFY KTVSFIMADE QLKRISKVQA KPAVEHRVAE LMVYREADWV KKTGDKLTIL IKKIIECVSV HPHWKVRLEL VELVEDLLLK CSQSLVECAG PLLKALVGLV NDESPEIQAQ CNKVLRHFAD QKVVVGNKAL ADILSESLHS LATSLPRLMN SQDDQGKFST LSLLLGYLKL LGPKINFVLN SVAHLQRLSK ALIQVLELDV ADIKIVEERR WNSDDLNASP KTSATQPWNR IQRRYFRFFT DERIFMLLRQ VCQLLGYYGN LYLLVDHFME LYHQSVVYRK QAAMILNELV TGAAGLEVED LHEKHIKTNP EELREIVTSI LEEYTSQENW YLVTCLETEE MGEELMMEHP GLQAITSGEH TCQVTSFLAF SKPSPTICSM NSNIWQICIQ LEGIGQFAYA LGKDFCLLLM SALYPVLEKA GDQTLLISQV ATSTMMDVCR ACGYDSLQHL INQNSDYLVN GISLNLRHLA LHPHTPKVLE

VMLRNSDANL LPLVADVVQD VLATLDQFYD KRAASFVSVL HALMAALAQW FPDTGNLGHL QEQSLGEEGS HLNQRPAALE KSTTTAEDIE QFLLNYLKEK DVADGNVSDF DNEEEEQSVP PKVDENDTRP DVEPPLPLQI QIAMDVMERC IHLLSDKNLQ IRLKVLDVLD LCVVVLQSHK NQLLPLAHQA WPSLVHRLTR DAPLAVLRAF KVLRTLGSKC GDFLRSRFCK DVLPKLAGSL VTQAPISARA GPVYSHTLAF KLQLAVLQGL GPLCERLDLG EGDLNKVADA CLIYLSVKQP VKLQEAARSV FLHLMKVDPD STWFLLNELY CPVQFTPPHP SLHPVQLHGA SGQQNPYTTN VLQLLKELQ

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:

Product Details

- 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:	TTI1
Alternative Name:	TTI1 (TTI1 Products)
Background:	TELO2-interacting protein 1 homolog (Protein SMG10),FUNCTION: Regulator of the DNA damage response (DDR). Part of the TTT complex that is required to stabilize protein levels of the phosphatidylinositol 3-kinase-related protein kinase (PIKK) family proteins. The TTT complex is involved in the cellular resistance to DNA damage stresses, like ionizing radiation (IR), ultraviolet (UV) and mitomycin C (MMC). Together with the TTT complex and HSP90 may participate in the proper folding of newly synthesized PIKKs. Promotes assembly, stabilizes and maintains the activity of mTORC1 and mTORC2 complexes, which regulate cell growth and survival in response to nutrient and hormonal signals. {ECO:0000269|PubMed:20427287, ECO:0000269|PubMed:20801936, ECO:0000269|PubMed:20810650}.
Molecular Weight:	122.1 kDa
UniProt:	O43156

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies

Application Details

	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)

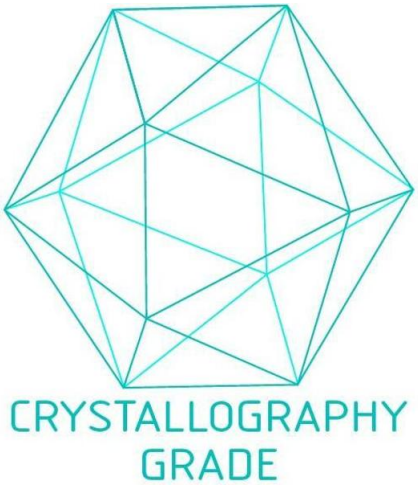

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process

