

Datasheet for ABIN3096414
XPOT Protein (AA 1-962) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	XPOT
Protein Characteristics:	AA 1-962
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This XPOT protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MDEQALLGLN PNADSDFRQR ALAYFEQLKI SPDAWQVCAE ALAQRYSDD HVKFFCFQVL
EHQVKYKYSE LTTVQQQLIR ETLISWLQAQ MLNPQPEKTF IRNKAAQVFA LLFVTEYLTK
WPKFFFDILS VVDLNRGVD LYLRILMAID SELVDRDVVH TSEEARRNTL IKDTMREQCI
PNLVESWYQI LQNYQFTNSE VTCQCLEVVG AYVSWIDL SL IANDRFINML LGHMSIEVLR
EEACDCLFEV VNKGM DPVDK MKLVESLCQV LQSAGFFSID QEEDVD FLAR FSKLVNGMGQ
SLIVSWSKLI KNGDIKNAQE ALQAIETKVA LMLQLLIHED DDISSNIIGF CYDY LHILKQ
LTVLSDQQKA NVEAIMLAVM KKLTYDEEYN FENEGEDEAM FVEYRQKLKL LLDRLAQVSP
ELLASVRRV FSSTLQNWQT TRFMEVEVAI RLLYMLAEAL PVSHGAHFSG DVSKASALQD
MMRTLVTSGV SSYQHTSVTL EFFETVRYE KFFTVEPQHI PCVLMAFLDH RGLRHSSAKV
RSRTAYLFSR FVKSLNKQMN PFIEDILNRI QDLLELSPPE NGHQSLLSSD DQLFIYETAG
VLIVNSEYPA ERKQALMRNL LTPLMEKFKI LLEKLMLAQD EERQASLADC LNHAVGFASR
TSKAFSNKQT VKQCGCSEVY LDCLQTF LPA LSCPLQKDIL RSGVRTFLHR MIICLEEEVL

PFIPSASEHM LKDCEAKDLQ EFIPLINQIT AKFKIQVSPF LQQMFMPLLH AIFEVLLRPA
EENDQSAALE KQMLRRSYFA FLQTVTGS GM SEVIANQGAE NVERVLVTVI QGAVEYPDPI
AQKTCFIILS KLVELWGGKD GPVGFADFVY KHIVPACFLA PLKQTFDLAD AQTVLALSEC
AVTLKTIHLK RGPECVQYLQ QEYLP SLQVA PEIIQEFCQA LQQPDAKVKF NYLKVFFQRA KP

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®).

Purity: > 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Target Details

Target: XPOT

Alternative Name: XPOT ([XPOT Products](#))

Background: Exportin-T (Exportin(tRNA)) (tRNA exportin),FUNCTION: Mediates the nuclear export of aminoacylated tRNAs. In the nucleus binds to tRNA and to the GTPase Ran in its active GTP-bound form. Docking of this trimeric complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the tRNA from the export receptor. XPOT then return to the nuclear compartment and mediate another round of transport. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. {ECO:0000269|PubMed:12138183, ECO:0000269|PubMed:9512417, ECO:0000269|PubMed:9660920}.

Molecular Weight: 110.0 kDa

UniProt: [O43592](#)

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

Application Details

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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)