

Datasheet for ABIN3118828
xpr1 Protein (AA 1-696) (Strep Tag)

1 Image

[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	xpr1
Protein Characteristics:	AA 1-696
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This xpr1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MKFAEHL SAH ITPEWRKQYI QYEA FKD MLY SAQDQAPSVE VTDED TVK RY FAKFEEKFFQ TCEKELAKIN TFYSEKLAEA QRRFATLQNE LQSS LD AQKE STGVTTLRQR RKPVFHLSHE ERVQHRNIKD LKLAFSEFY L SLILLQNYQN LNFTGFRKIL KKHDKILETS RGADWRVAHV EVAPFYTCKK INQLISETEA VVTNELEDGD RQKAMKRLRV PPLGAAQPAP AWTTFRVGLF CGIFIVLNIT LV LA AVFKLE TDRSIWPLIR IYRGGFLLIE FLFLLGINTY GWRQAGVNHV LIFELNPRSN LSHQHLFEIA GFLGILWCLS LLACFFAPIS VIPTYVYPLA LYGF MF VFLI NPTKTFYYKS RFWLLKLLFR VFTAPFHKVG FADFWLADQL NSLSVILMDL EYMICFYSLE LKWDESKGLL PNNSEESGIC HKYTYGVRAI VQCIPAWLRF IQCLRRYRDT KRAFP HL VNA GKYSTTFFMV TFAALYSTHK ERGHS DT MVF FYLWIVFYII SSCYTLI W DL KMDWGLFDKN AGENTFLREE IVYPQKAYYY CAI ED VILR FAWTIQISIT STTLLPHSGD IIATVFAPLE VFRRFVWNFF RLENEHLN NC GEFRAVRDIS VAPLNADDQT LLEQMMDQDD GVRNRQKNRS WKYNQ S ISLR RPRLASQSKA RDTKVLIEDT DDEANT
-----------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

Product Details

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:	xpr1
Alternative Name:	XPR1 (xpr1 Products)
Background:	<p>Solute carrier family 53 member 1 (Phosphate exporter SLC53A1) (Protein SYG1 homolog) (Xenotropic and polytropic murine leukemia virus receptor X3) (X-receptor) (Xenotropic and polytropic retrovirus receptor 1),FUNCTION: Inorganic ion transporter that mediates phosphate ion export across plasma membrane. Plays a major role in phosphate homeostasis, preventing intracellular phosphate accumulation and possible calcium phosphate precipitation, ultimately preserving calcium signaling. The molecular mechanism of phosphate transport, whether electrogenic, electroneutral or coupled to other ions, remains to be elucidated (PubMed:23791524, PubMed:25938945, PubMed:31043717) (By similarity). Binds inositol hexakisphosphate (Ins6P) and similar inositol polyphosphates, such as 5-diphospho-inositol pentakisphosphate (5-InsP7), important intracellular signaling molecules involved in regulation of phosphate flux (PubMed:27080106). {ECO:0000250 UniProtKB:Q9Z0U0, ECO:0000269 PubMed:23791524, ECO:0000269 PubMed:25938945, ECO:0000269 PubMed:27080106, ECO:0000269 PubMed:31043717}.</p>
Molecular Weight:	81.5 kDa
UniProt:	Q9UBH6

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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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)

Images



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