

Datasheet for ABIN3094771

**PREX2 Protein (AA 1-1606) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	PREX2 (DEPDC2)
Protein Characteristics:	AA 1-1606
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PREX2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

## Product Details

Sequence:	<p>MSEDSRGDSR AESAKDLEKQ LRLRVCVLSE LQKTERDYVG TLEFLVSAFL HRMNQCAASK</p> <p>VDKNVTEETV KMLFSNIEDI LAVHKEFLKV VEECLHPEPN AQQEVGTCFL HFKDKFRIYD</p> <p>EYCSNHEKAQ KLLLELNKIR TIRTFLLNCM LLGGRKNTDV PLEGYLVTPI QRICKYPLIL</p> <p>KELLKRTPRK HSDYAAVMEA LQAMKAVCSN INEAKRQMEK LEVLEEWQSH IEGWEGSNIT</p> <p>DTCTEMLMCG VLLKISSGNI QERVFFLFDN LLVYCKRKHR RLKNSKASTD GHRYLFRGRI</p> <p>NTEVMEVENV DDGTADFHSS GHIVNGWVKI HNTAKNKWV CMAKTPEEKH EWFEAILKER</p> <p>ERRKGLKLG M EQDTWVMISE QGEKLYKMMC RQGNLIKDRK RKLTTFPKCF LGSEFVSWLL</p> <p>EIGEHRPEE GVHLGQALLE NGIIHHVTDK HQFKPEQMLY RFRYDDGTFY PRNEMQDVIS</p> <p>KGVRLYCRLH SLFTPVIRDK DYHLRTYKSV VMANKLIDWL IAQGDCRTRE EAMIFGVGLC</p> <p>DNGFMHHVLE KSEFKDEPLL FRFFSDEEME GSNMKHRLMK HDLKVVENVI AKSLLIKSNE</p> <p>GSYGFGLEDK NKVPIIKLVE KGSNAEMAGM EVGKKIFAIN GDLVFMRPFN EVDCFLKSC</p> <p>NSRKPLRVLV STKPRETVKI PDSADGLGFQ IRFGGPSVVH AVGRGTAAAA AGLHPGQCII</p>
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KVNGINVSKE THASVIAHVT ACRKYRRPTK QDSIQWVYNS IESAQEDLQK SHSKPPGDEA  
GDAFDCKVEE VIDKFNTMAI IDGKKEHVSL TVDNVHLEYG VVYEYDSTAG IKCNVVEKMI  
EPKGFFSLTA KILEALAKSD EHFVQNCTSL NSLNEVIPTD LQSKFSALCS ERIEHLQCRI  
SSYKKFSRVL KNRAWPTFKQ AKSKISPLHS SDFCPTNCHV NVMEVSYPKT STSLGSAFGV  
QLDSRKHNSH DKENKSSEQG KLSPMVYIQH TITMAAPSG LSLGQQDGHG LRYLLKEEDL  
ETQDIYQKLL GKLQTALKEV EMCVCQIDDL LSSITYSPKL ERKTSEGIIP TDSDNEKGER  
NSKRVCFNVA GDEQEDSGHD TISNRDSYSD CNSNRNSIAS FTSICSSQCS SYFHSDMDS  
GDELPLSVRI SHDKQDKIHS CLEHLFSQVD SITNLLKGQA VVRAFDQTKY LTPGRGLQEF  
QQEMEPKLSC PKRLRLHIKQ DPWNLPSSVR TLAQNIRKFV EEVKCRLLLA LLEYSSETQ  
LRRDMVFCQT LVATVCAFSE QLMAALNQMF DNSKENEMET WEASRRWLDQ IANAGVLFHF  
QSLSPNLTD EQAMLEDTLV ALFDLEKVSF YFKPSEEEPL VANVPLTYQA EGSRQALKVY  
FYIDSYHFEQ LPQRLKNGGG FKIHPVLFAQ ALESMEGYYY RDNVSVVEFQ AQINAASLEK  
VKQYNQKLRA FYLDKSNP NSTSKAAYVD KLMRPLNALD ELYRLVASFI RSKRTAACAN  
TACSASGVGL LSVSSELCNR LGACHIIMCS SGVHRCTLSV TLEQAAILAR SHGLPPRYIM  
QATDVMRKQG ARVQNTAKNL GVRDRTPQSA PRLYKLCEPP PPAGEE

**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-

Product Details

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®):  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:	PREX2 (DEPDC2)
Alternative Name:	PREX2 (DEPDC2 Products)
Background:	Phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 2 protein (P-Rex2) (PtdIns(3,4,5)-dependent Rac exchanger 2) (DEP domain-containing protein 2),FUNCTION: Functions as a RAC1 guanine nucleotide exchange factor (GEF), activating Rac proteins by exchanging bound GDP for free GTP. Its activity is synergistically activated by phosphatidylinositol 3,4,5-trisphosphate and the beta gamma subunits of heterotrimeric G protein. Mediates the activation of RAC1 in a PI3K-dependent manner. May be an important mediator of Rac signaling, acting directly downstream of both G protein-coupled receptors and

## Target Details

	phosphoinositide 3-kinase. {ECO:0000269 PubMed:15304342, ECO:0000269 PubMed:15304343, ECO:0000269 PubMed:15897194}.
Molecular Weight:	182.6 kDa
UniProt:	<a href="#">Q70Z35</a>

## 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:	<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)



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