

Datasheet for ABIN3094488

## PEX1 Protein (AA 1-1283) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	PEX1
Protein Characteristics:	AA 1-1283
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PEX1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MWGSDDLGA GGGGA AVTVA FTNARD CFLH LPRRLVAQLH LLQNQAIEVV WSHQPAFLSW</p> <p>VEGRHFSDQG ENVAEINRQV GQKLGLSNGG QVFLKPCSHV VSCQQVEVEP LSADDWEILE</p> <p>LHAVSLEQHL LDQIRIVFPK AIFPVWVDQQ TYIFIQIVAL IPAASYGRLE TDTKLLIQPK</p> <p>TRRAKENTFS KADA EYKKLH SYGRDQKGMM KELQTKQLQS NTVGITESNE NESEIPVDSS</p> <p>SVASLWTMIG SIFS FQSEKK QETSWGLTEI NAFKNMQSKV VPLDNIFRVC KSQPPSIYNA</p> <p>SATSVFHKHC AIHVFPWDQE YFDVEPSFTV TYGKLVKLLS PKQQQSKTKQ NVLSPEKEKQ</p> <p>MSEPLDQKKI RSDHNEEDEK ACVLQVWVWG LEELNNAIKY TKNVEVLHLG KWIIPDDLRLK</p> <p>RLNIEMHAVV RITPVEVTPK IPRSLKLQPR ENLPKDISEE DIKTVFYSWL QQSTTTMLPL</p> <p>VISEEEFIKL ETKDGLKEFS LSIVHSWEKE KDKNIFLLSP NLLQKTTIQV LLDPMVKEEN SEEIDFILPF</p> <p>LKLSSLGGVN SLGVSSLEHI THSLLGRPLS RQLMSLVAGL RNGALLLTGG KGSGKSTLAK</p> <p>AICKEAFDKL DAHVERVDCK ALRGKRLNI QKTLEVAFSE AVWMQPSVVL LDDLDLIAGL</p>

PAVPEHEHSP DAVQSQRLAH ALNDMIKEFI SMGSLVALIA TSQSQQSLHP LLVSAQGVHI  
FQCVQHIQPP NQEQRCEILC NVIKNKLDCD INKFTDLDLQ HVAKETGGFV ARDFTVLVDR  
AIHSRLSRQS ISTREKLVL TLDQKALRG FLPASLRSVN LHKPRDLGWD KIGGLHEVRQ  
ILMDTIQLPA KYPELFANLP IRQRTGILLY GPPGTGKTLL AGVIARESRM NFISVKGPEL  
LSKYIGASEQ AVRDFIRAQ AAKPCILFFD EFESIAPRRG HDNTGVTDV VNQLLTQLDG  
VEGLQGVYVL AATSRPDLID PALLRPGRD KCVYCPDPDQ VSRLEILNVL SDSLPLADDV  
DLQHVASVTD SFTGADLKAL LYNAQLEALH GMLLSSGLQD GSSSSSDSLSSMVFLNHS  
SGSDDSAGDG ECGLDQSLVS LEMSEILPDE SKFNMYRLYF GSSYESELGN GTSSDLSSQC  
LSAPSSMTQD LPGVPGKDQL FSQPPVLRTA SQEGCQELTQ EQRDQLRADI SIIKGRYRSQ  
SGEDES MNQP GPIKTRLAIS QSHLMTALGH TRPSISEDW KNFAELYESF QNPKRRKNQS  
GTMFRPGQKV TLA

**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.**

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### 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 -

## Product Details

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.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

## Target Details

Target:	PEX1
Alternative Name:	PEX1 ( <a href="#">PEX1 Products</a> )
Background:	<p>Peroxisomal ATPase PEX1 (EC 3.6.4.-) (Peroxin-1) (Peroxisome biogenesis disorder protein 1) (Peroxisome biogenesis factor 1),FUNCTION: Component of the PEX1-PEX6 AAA ATPase complex, a protein dislocase complex that mediates the ATP-dependent extraction of the PEX5 receptor from peroxisomal membranes, an essential step for PEX5 recycling (PubMed:11439091, PubMed:16314507, PubMed:16854980, PubMed:21362118, PubMed:29884772). Specifically recognizes PEX5 monoubiquitinated at 'Cys-11', and pulls it out of the peroxisome lumen through the PEX2-PEX10-PEX12 retrotranslocation channel (PubMed:29884772). Extraction by the PEX1-PEX6 AAA ATPase complex is accompanied by unfolding of the TPR repeats and release of bound cargo from PEX5 (PubMed:29884772). {ECO:0000269 PubMed:11439091, ECO:0000269 PubMed:16314507, ECO:0000269 PubMed:16854980, ECO:0000269 PubMed:21362118, ECO:0000269 PubMed:29884772}.</p>
Molecular Weight:	142.9 kDa
UniProt:	<a href="#">043933</a>

## Application Details

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

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as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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### Comment:

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### Restrictions:

For Research Use only

## Handling

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### Format:

Liquid

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### Buffer:

The buffer composition is at the discretion of the manufacturer.

Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

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### Handling Advice:

Avoid repeated freeze-thaw cycles.

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### Storage:

-80 °C

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### Storage Comment:

Store at -80°C.

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### Expiry Date:

12 months