

### Datasheet for ABIN3117460

# PTCHD1 Protein (AA 1-888) (Strep Tag)



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### Overview

Quantity:	250 μg
Target:	PTCHD1
Protein Characteristics:	AA 1-888
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTCHD1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MLRQVLHRGL RTCFSRLGHF IASHPVFFAS APVLISILLG ASFSRYQVEE SVEHLLAPQH
	SLAKIERNLV NSLFPVNRSK HRLYSDLQTP GRYGRVIVTS FQKANMLDQH HTDLILKLHA
	AVTKIQVPRP GFNYTFAHIC ILNNDKTCIV DDIVHVLEEL KNARATNRTN FAITYPITHL
	KDGRAVYNGH QLGGVTVHSK DRVKSAEAIQ LTYYLQSINS LNDMVAERWE SSFCDTVRLF
	QKSNSKVKMY PYTSSSLRED FQKTSRVSER YLVTSLILVV TMAILCCSMQ DCVRSKPWLG
	LLGLVTISLA TLTAAGIINL TGGKYNSTFL GVPFVMLGHG LYGTFEMLSS WRKTREDQHV
	KERTAAVYAD SMLSFSLTTA MYLVTFGIGA SPFTNIEAAR IFCCNSCIAI FFNYLYVLSF
	YGSSLVFTGY IENNYQHSIF CRKVPKPEAL QEKPAWYRFL LTARFSEDTA EGEEANTYES
	HLLVCFLKRY YCDWITNTYV KPFVVLFYLI YISFALMGYL QVSEGSDLSN IVATATQTIE
	YTTAQQKYFS NYSPVIGFYI YESIEYWNTS VQEDVLEYTK GFVRISWFES YLNYLRKLNV
	STGLPKKNFT DMLRNSFLKA PQFSHFQEDI IFSKKYNDEV DVVASRMFLV AKTMETNREE

LYDLLETLRR LSVTSKVKFI VFNPSFVYMD RYASSLGAPL HNSCISALFL LFFSAFLVAD SLINVWITLT VVSVEFGVIG FMTLWKVELD CISVLCLIYG INYTIDNCAP MLSTFVLGKD FTRTKWVKNA LEVHGVAILQ SYLCYIVGLI PLAAVPSNLT CTLFRCLFLI AFVTFFHCFA ILPVILTFLP PSKKKRKEKK NPENREEIEC VEMVDIDSTR VVDQITTV

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 posttranslational 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: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). Grade: custom-made **Target Details** Target: PTCHD1 Alternative Name: PTCHD1 (PTCHD1 Products) Background: Patched domain-containing protein 1, FUNCTION: Required for the development and function of the thalamic reticular nucleus (TRN), a part of the thalamus that is critical for thalamocortical transmission, generation of sleep rhythms, sensorimotor processing and attention. {ECO:0000250|UniProtKB:Q14B62}. 101.3 kDa Molecular Weight: UniProt: **Q96NR3 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 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.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months