

Datasheet for ABIN3114732

Patched 1 Protein (PTCH1) (AA 1-1447) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Patched 1 (PTCH1)
Protein Characteristics:	AA 1-1447
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Patched 1 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MASAGNAAEP QDRGGGGSGC IGAPGRPAGG GRRRRTGGLR RAAAPDRDYL HRPSYCDAAF ALEQISKGKA TGRKAPLWLR AKFQRLFLKL GCYIQKNCCK FLVVGLLIFG AFAVGLKAAN LETNVEELWV EVGGRVSREL NYTRQKIGEE AMFNPQLMIQ TPKEEGANVL TTEALLQHLD SALQASRVHV YMYNRQWKLE HLCYKSGELI TETGYMDQII EYLYPCLIT PLDCFWEAK LQSGTAYLLG KPPLRWTNFD PLEFLEELKK INYQVDSWEE MLNKAEVGHG YMDRPLNPA DPDCPATAPN KNSTKPLDMA LVLNGGCHGL SRKYMHWQEE LIVGGTVKNS TGKLVSAHAL QTMFQLMTPK QMYEHFKGYE YVSHINWNE KAAAILEAWQ RTYVEVVHQS VAQNSTQKVL SFTTTTLLDDI LKSFSDVSVI RVASGYLLML AYACLTMLRW DCSKSQGAVG LAGVLLVALS VAAGLGLCSL IGISFNAATT QVLPFLALGV GVDDVFLLAH AFSETGQNK R IPFEDRTGEC LKRTGASVAL TSISNVTAF MAALIPIPAL RAFSLQAQV VVFNFAMVLL IFPAILSMDL YRREDRRLDI FCCFTSPCVS RVIQVEPQAY TDTHDNTRYSPPPYSSHSF AHETQITMQS TVQLRTEYDP HTHVYYTTAE PRSEISVQPV TVTQDTLSCQ SPESTSSTRD LLSQFSDSSL
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HCLEPPCTKW TLSSFAEKHY APFLLKPKAK VVIFLFLGL LGVSLYGTTT VRDGLDLTDI
VPRETREYDF IAAQFKYFSF YNMYIVTQKA DYPNIQHLLY DLHRSFSNVK YVMLEENKQL
PKMWLHYFRD WLQGLQDAFD SDWETGKIMP NNYKNGSDDG VLAYKLLVQT GSRDKPIDIS
QLTKQRLVDA DGIINPSAFY IYLTAWVSND PVAYAASQAN IRPHRPEWVH DKADYMPETR
LRIPAAEPIE YAQFPFYLNG LRDTSDFVEA IEKVRTICSN YTSGLGLSSYP NGYPFLFWEQ
YIGLRHWLLL FISVVLACTF LVCAVFLNLP WTAGIIVMVL ALMTVELFGM MGLIGIKLSA
VPVVILIASV GIGVEFTVHV ALAFLTAIGD KNRRRAVLAL HMFAPVLDGA VSTLLGVML
AGSEFDFIVR YFFAVLAILT ILGVNLGLVL LPVLLSFFGP YPEVSPANGL NRLPTPSPEP
PPSVVRFAMP PGHTHSGSDS SDSEYSSQTT VSGLSEELRH YEAQQGAGGP AHQVIVEATE
NPVFAHSTVV HPESRHHPPS NPRQQPHLDS GSLPPGRQQG QPRRDPPREG LWPPPYRPRR
DAFEISTEGH SGPSNRARWG PRGARSHNPR NPASTAMGSS VPGYCQPITT VTASASVTVA
VHPPVPVPGPG RNPRGGLCPG YPETDHGLFE DPHVPFHVRC ERRDSKVEVI ELQDVECEER
PRGSSSN

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human PTCH1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use

Product Details

the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	Patched 1 (PTCH1)
Alternative Name:	PTCH1 (PTCH1 Products)
Background:	Acts as a receptor for sonic hedgehog (SHH), indian hedgehog (IHH) and desert hedgehog (DHH). Associates with the smoothened protein (SMO) to transduce the hedgehog's proteins signal. Seems to have a tumor suppressor function, as inactivation of this protein is probably a necessary, if not sufficient step for tumorigenesis. {ECO:0000269 PubMed:21537345}.
Molecular Weight:	161.7 kDa Including tag.
UniProt:	Q13635
Pathways:	Hedgehog Signaling , Carbohydrate Homeostasis , Tube Formation

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:	In cases in which it is highly likely that the recombinant protein with the default tag will be

Application Details

insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
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