

Datasheet for ABIN3094761
PRP19 Protein (AA 2-504) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	PRP19 (PRPF19)
Protein Characteristics:	AA 2-504
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRP19 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: SLICISISNEV PEHPCVSPVS NHVYERRLIE KYIAENGTDI INNQPLSEEQ LIDIKVAHPI
RPKPPSATS I PAILKALQDE WDAVMLHSFT LRQLQTTRQ ELSHALYQHD AACRVIARLT
KEVTAAREAL ATLPQAGLI VPQAVPSSQP SVVGAGEPMD LGELVGMTPE IIQKLQDKAT
VLTTERRKKRG KTVPEELVKP EELSKYRQVA SHVGLHSASI PGILALDLCP SDTNKILTGG
ADKNVVVFDK SSEQILATLK GHTKKVTSV FHPQDLVFS ASPDATIRIW SVPNASCVQV
VRAHESAVTG LSLHATGDYL LSSSDQYWA FSDIQTGRVL TKVTDETS GC SLTCAQFHPD
GLIFGTGTMD SQUIWDLKE RTNVANFPGH SGPITSIAFS ENGYLATAA DDSSVKLWDL
RKLKNFKTLQ LDNNFEVKSL IFDQSGTYLA LGGTDVQIYI CKQWTEILHF TEHSGLTGTV
AFGHHAKFIA STGMDRSLKF YSL

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

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human PRPF19 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 the Expasy's protparam tool to determine the absorption coefficient of each protein.

- Purification:
- Two step purification of proteins expressed in baculovirus infected SF9 insect cells:
1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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: >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:	PRP19 (PRPF19)
Alternative Name:	PRPF19 (PRPF19 Products)
Background:	<p>Ubiquitin-protein ligase which is a core component of several complexes mainly involved pre-mRNA splicing and DNA repair. Core component of the PRP19C/Prp19 complex/NTC/Nineteen complex which is part of the spliceosome and participates in its assembly, its remodeling and is required for its activity. During assembly of the spliceosome, mediates 'Lys-63'-linked polyubiquitination of the U4 spliceosomal protein PRPF3. Ubiquitination of PRPF3 allows its recognition by the U5 component PRPF8 and stabilizes the U4/U5/U6 tri-snRNP spliceosomal complex (PubMed:20595234). Recruited to RNA polymerase II C-terminal domain (CTD) and the pre-mRNA, it may also couple the transcriptional and spliceosomal machineries (PubMed:21536736). The XAB2 complex, which contains PRPF19, is also involved in pre-mRNA splicing, transcription and transcription-coupled repair (PubMed:17981804). Beside its role in pre-mRNA splicing PRPF19, as part of the PRP19-CDC5L complex, plays a role in the DNA damage response/DDR. It is recruited to the sites of DNA damage by the RPA complex where PRPF19 directly ubiquitinates RPA1 and RPA2. 'Lys-63'-linked polyubiquitination of the RPA complex allows the recruitment of the ATR-ATRIP complex and the activation of ATR, a master regulator of the DNA damage response (PubMed:24332808). May also play a role in DNA double-strand break (DSB) repair by recruiting the repair factor SETMAR to altered DNA (PubMed:18263876). As part of the PSO4 complex may also be involved in the DNA interstrand cross-links/ICLs repair process (PubMed:16223718). In addition, may also mediate 'Lys-48'-linked polyubiquitination of substrates and play a role in proteasomal degradation (PubMed:11435423). May play a role in the biogenesis of lipid droplets (By similarity). May play a role in neural differentiation possibly through its function as part of the spliceosome (By similarity). {ECO:0000250 UniProtKB:Q99KP6, ECO:0000250 UniProtKB:Q9JMJ4, ECO:0000269 PubMed:11082287, ECO:0000269 PubMed:11435423, ECO:0000269 PubMed:12960389, ECO:0000269 PubMed:15660529, ECO:0000269 PubMed:16223718, ECO:0000269 PubMed:16332694, ECO:0000269 PubMed:16388800, ECO:0000269 PubMed:17349974, ECO:0000269 PubMed:18263876, ECO:0000269 PubMed:21536736, ECO:0000269 PubMed:24332808, ECO:0000303 PubMed:17981804, ECO:0000303 PubMed:20595234}.</p>
Molecular Weight:	56.0 kDa Including tag.
UniProt:	Q9UMS4
Pathways:	Ribonucleoprotein Complex Subunit Organization

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 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