

Datasheet for ABIN3137464

TIMELESS Protein (AA 1-1197) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TIMELESS
Protein Characteristics:	AA 1-1197
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TIMELESS protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MDLYMMNCEL LATCSALGYL EGGTYHKEPD CLESVKDLIR YLRHEDETRD VRQQLGAAQI LQSDLLPILT QHRQDKPLFD AVIRLMVNLT QPALLCFGSV PKDSSVRHHF LQVLTYLQAY KEAFASEKAF GVLSETLYEL LQLGWEDRQE EDNLLIERIL LLVRNILHVP ANLEQEKSID DDASIHDRLL WAIHLSGMDD LLLFLSSSSA EQQWSLHVLE IISLMFRDQT PEQLAGVGQG RLAQRSTDV AELEVLQRQ MAEKRRARALQ RGNRHSRFGG SYIVQGLKSI GEKDVVFHKG LHNLQNYSSD LGKQPRRVPK RRQAAQELSV HRRSVLNVRL FLRDFCSEFL ENCYNPLMGA VKDHLLRERA QQHDETYMW AMAFFMAFNR AATFRPGLVS ETLSIRTFHF VEQNLNYYE MMLTDRKEAA SWARRMHLAL KAYQELLATV NEMDMCPDEA VRESSRIKN NIFYMMEYRE LFLALFRKFD ERYHPRSFLR DLVETTHLFL KMLERFCRSR GNLMVQNKRK KRKKKKKVQD QGVAFSQSPG ELEAMWPALA EQLLQCAQDP ELSVDPVVPF DAASEVPVEE QRVEAMVRIQ DCLTAGQAPQ ALALLRSARE VWPEGNAFGS PVISPGEEMQ LLKQILSTPL PRQQEPEEGD AEEEEEEEE EELQVVQVSE KEFNFLEYLK RFASSTIVRA YVLLLSYRQ NSAHTNHCIA
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KMLHRLAHGL GMEALLFQLS LFCLFNRLLS DPAAAAYKEL VTFAKYIIGK FFALAAVNQK
AFVELLFWKN TAVVREMTQG YGSLDSGSSS HRAPLWSPEE EAQLQELYLA HKDVEGQDVV
ETILAHLKVV PRTRKQVIHH LVRMGLADSV KEFQKRKGQTQ IVLWTEQEL ELQRLFEEFR
DSDDVLGQIM KNITAKRSRA RVVDKLLALG LVSERRQLYK KRRKKLAPSC MQNGEKSPRD
PWQEDPEEED EHLPEDESED EESEEGLPSP QGQGSSSLSA ENLGESLRQE GLSAPLLWLQ
SSLIRAANDR EEDGCSQAIP LVPLTEENEE AMENEQFQHL LRKLGIRPPS SGQETFWRIP
AKLSSTQLRR VAASLSQQEN EEEREEPEP GVPGEQGPSE EHRTEALRAL LSARKRKAGL
GPTEEEATGE EEWNSAPKKR QLLDSDEEED DEGRRAVSG TPRVHRKKRF QIEDEDD

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.
- Mouse Timeless 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.

Product Details

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: TIMELESS

Alternative Name: Timeless ([TIMELESS Products](#))

Background: Plays an important role in the control of DNA replication, maintenance of replication fork stability, maintenance of genome stability throughout normal DNA replication and in the regulation of the circadian clock. Involved in the determination of period length and in the DNA damage-dependent phase advancing of the circadian clock. Negatively regulates CLOCK|NPAS2-ARTNL/BMAL1|ARTNL2/BMAL2-induced transactivation of PER1 possibly via translocation of PER1 into the nucleus. Forms a complex with TIPIN and this complex regulates DNA replication processes under both normal and stress conditions, stabilizes replication forks and influences both CHEK1 phosphorylation and the intra-S phase checkpoint in response to genotoxic stress. Timeless promotes TIPIN nuclear localization. Involved in cell survival after DNA damage or replication stress. May be specifically required for the ATR-CHEK1 pathway in the replication checkpoint induced by hydroxyurea or ultraviolet light. May also play an important role in epithelial cell morphogenesis and formation of branching tubules. {ECO:0000269|PubMed:10428031, ECO:0000269|PubMed:10963667, ECO:0000269|PubMed:12875843, ECO:0000269|PubMed:23418588, ECO:0000269|PubMed:9856465}.

Molecular Weight: 138.5 kDa Including tag.

UniProt: [Q9R1X4](#)

Pathways: [Protein targeting to Nucleus](#), [Photoperiodism](#)

Application Details

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

Application Details

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

Comment: Protein has not been tested for activity yet. 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