

# Datasheet for ABIN3092902

## **HCFC1 Protein (AA 1020-2035) (His tag)**



#### Overview

Quantity:	1 mg
Target:	HCFC1
Protein Characteristics:	AA 1020-2035
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HCFC1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

#### **Product Details**

Sequence:

THETGTTNTA TTTVVANLGG HPQPTQVQFV CDRQEAAASL VTSTVGQQNG SVVRVCSNPP CETHETGTTN TATTATSNMA GQHGCSNPPC ETHETGTTNT ATTAMSSVGA NHQRDARRAC AAGTPAVIRI SVATGALEAA QGSKSQCQTR QTSATSTTMT VMATGAPCSA GPLLGPSMAR EPGGRSPAFV QLAPLSSKVR LSSPSIKDLP AGRHSHAVST AAMTRSSVGA GEPRMAPVCE SLQGGSPSTT VTVTALEALL CPSATVTQVC SNPPCETHET GTTNTATTSN AGSAQRVCSN PPCETHETGT THTATTATSN GGTGQPEGGQ QPPAGRPCET HQTTSTGTTM SVSVGALLPD ATSSHRTVES GLEVAAAPSV TPQAGTALLA PFPTQRVCSN PPCETHETGT THTATTVTSN MSSNQDPPPA ASDQGEVEST QGDSVNITSS SAITTTVSST LTRAVTTVTQ STPVPGPSVP PPEELQVSPG PRQQLPPRQL LQSASTALMG ESAEVLSASQ TPELPAAVDL SSTGEPSSGQ ESAGSAVVAT VVVQPPPPTQ SEVDQLSLPQ ELMAEAQAGT TTLMVTGLTP EELAVTAAAE AAAQAAATEE AQALAIQAVL QAAQQAVMGT GEPMDTSEAA ATVTQAELGH LSAEGQEGQA TTIPIVLTQQ ELAALVQQQQ LQEAQAQQQH HHLPTEALAP ADSLNDPAIE SNCLNELAGT

VPSTVALLPS TATESLAPSN TFVAPQPVVV ASPAKLQAAA TLTEVANGIE SLGVKPDLPP
PPSKAPMKKE NQWFDVGVIK GTNVMVTHYF LPPDDAVPSD DDLGTVPDYN QLKKQELQPG
TAYKFRVAGI NACGRGPFSE ISAFKTCLPG FPGAPCAIKI SKSPDGAHLT WEPPSVTSGK
IIEYSVYLAI QSSQAGGELK SSTPAQLAFM RVYCGPSPSC LVQSSSLSNA HIDYTTKPAI
IFRIAARNEK GYGPATQVRW LQETSKDSSG TKPANKRPMS SPEMKSAPKK SKADGQ

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 HCFC1 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 receival 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.
- 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.

# **Product Details** >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. Purity: Sterility: 0.22 µm filtered Endotoxin Level: Protein is endotoxin free Grade: Crystallography grade **Target Details** HCFC1 Target: HCFC1 (HCFC1 Products) Alternative Name: Background: Involved in control of the cell cycle. Also antagonizes transactivation by ZBTB17 and GABP2, represses ZBTB17 activation of the p15(INK4b) promoter and inhibits its ability to recruit p300. Coactivator for EGR2 and GABP2. Tethers the chromatin modifying Set1/Ash2 histone H3 'Lys-4' methyltransferase (H3K4me) and Sin3 histone deacetylase (HDAC) complexes (involved in the activation and repression of transcription, respectively) together. Component of a THAP1/THAP3-HCFC1-OGT complex that is required for the regulation of the transcriptional activity of RRM1. As part of the NSL complex it may be involved in acetylation of nucleosomal histone H4 on several lysine residues. In case of human herpes simplex virus (HSV) infection, HCFC1 forms a multiprotein-DNA complex with the viral transactivator protein VP16 and POU2F1 thereby enabling the transcription of the viral immediate early genes. {ECO:0000269|PubMed:10629049, ECO:0000269|PubMed:10675337, ECO:0000269|PubMed:10779346, ECO:0000269|PubMed:10920196, ECO:0000269|PubMed:12244100, ECO:0000269|PubMed:12670868, ECO:0000269|PubMed:14532282, ECO:0000269|PubMed:15190068, ECO:0000269|PubMed:16624878, ECO:0000269|PubMed:17578910, ECO:0000269|PubMed:20018852, ECO:0000269|PubMed:20200153, ECO:0000269|PubMed:9990006}. Molecular Weight: 104.9 kDa Including tag.

Application Details

P51610

Application Notes:

UniProt:

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 gurantee though.

### **Application Details**

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
Format: Buffer:	Liquid  100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Buffer: Handling Advice:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.  Avoid repeated freeze-thaw cycles.