Datasheet for ABIN3092912

HIC1 Protein (AA 1-733) (His tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	HIC1
Protein Characteristics:	AA 1-733
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HIC1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MTFPEADILL KSGECAGQTM LDTMEAPGHS RQLLLQLNNQ RTKGFLCDVI IVVQNALFRA HKNVLAASSA YLKSLVVHDN LLNLDHDMVS PAVFRLVLDF IYTGRLADGA EAAAAAAVAP GAEPSLGAVL AAASYLQIPD LVALCKKRLK RHGKYCHLRG GGGGGGGYAP YGRPGRGLRA ATPVIQACYP SPVGPPPPPA AEPPSGPEAA VNTHCAELYA SGPGPAAALC ASERRCSPLC GLDLSKKSPP GSAAPERPLA ERELPPRPDS PPSAGPAAYK EPPLALPSLP PLPFQKLEEA APPSDPFRGG SGSPGPEPPG RPDGPSLLYR WMKHEPGLGS YGDELGRERG SPSERCEERG GDAAVSPGGP PLGLAPPPRY PGSLDGPGAG GDGDDYKSSS EETGSSEDPS PPGGHLEGYP CPHLAYGEPE SFGDNLYVCI PCGKGFPSSE QLNAHVEAHV EEEEALYGRA EAAEVAAGAA GLGPPFGGGG DKVAGAPGGL GELLRPYRCA SCDKSYKDPA TLRQHEKTHW LTRPYPCTIC GKKFTQRGTM TRHMRSHLGL KPFACDACGM RFTRQYRLTE HMRIHSGEKP YECQVCGGKF AQQRNLISHM KMHAVGGAAG AAGALAGLGG LPGVPGPDGK GKLDFPEGVF AVARLTAEQL SLKQQDKAAA AELLAQTTHF LHDPKVALES LYPLAKFTAE LGLSPDKAAE VLSQGAHLAA

Product Details

	GPDGRTIDRF SPT **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 HIC1 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. 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.

Product Details

Grade:	Crystallography grade

Target Details

Target:	HIC1
Alternative Name:	HIC1 (HIC1 Products)
Background:	Transcriptional repressor. Recognizes and binds to the consensus sequence '5-[CG]NG[CG]GGGCA[CA]CC-3'. May act as a tumor suppressor. May be involved in development of head, face, limbs and ventral body wall. Involved in down-regulation of SIRT1 and thereby is involved in regulation of p53/TP53-dependent apoptotic DNA-damage responses. The specific target gene promoter association seems to be depend on corepressors, such as CTBP1 or CTBP2 and MTA1. The regulation of SIRT1 transcription in response to nutrient deprivation seems to involve CTBP1. In cooperation with MTA1 (indicative for an association with the NuRD complex) represses transcription from CCND1/cyclin-D1 and CDKN1C/p57Kip2 specifically in quiescent cells. Involved in regulation of the Wnt signaling pathway probably by association with TCF7L2 and preventing TCF7L2 and CTNNB1 association with promoters of TCF-responsive genes. Seems to repress transcription from E2F1 and ATOH1 which involves ARID1A, indicative for the participation of a distinct SWI/SNF-type chromatin-remodeling complex. Probably represses transcription from ACKR3, FGFBP1 and EFNA1. {ECO:0000269|PubMed:12052894, ECO:0000269|PubMed:15231840, ECO:0000269|PubMed:16269335, ECO:0000269|PubMed:16690027, ECO:0000269|PubMed:16724116, ECO:0000269|PubMed:17213307, ECO:0000269|PubMed:18347096, ECO:0000269|PubMed:19486893, ECO:0000269|PubMed:19525223, ECO:0000269|PubMed:20154726, ECO:0000269|PubMed:20547755}.
Molecular Weight:	77.5 kDa Including tag.
UniProt:	Q14526
Pathways:	Positive Regulation of Response to DNA Damage Stimulus

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 gurantee 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

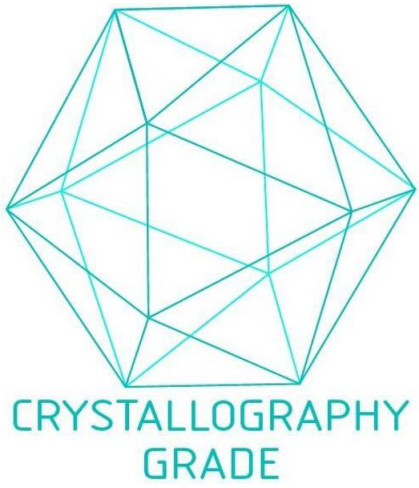

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process