

Datasheet for ABIN3092748
GLI2 Protein (AA 1-1586) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	GLI2
Protein Characteristics:	AA 1-1586
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GLI2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: METSASATAS EKQEAKSGIL EAAGFPDPGK KASPLVAAAA AAAAVAAQGV PQHLLPPFHA
PLPIDMRHQE GRYHYEPHSV HGVHGPPALS GSPVISDISL IRLSPHPAGP GESPFNAPHP
YVNPHEMEHYL RSVHSSPTLS MISAARGLSP ADVAQEHLKE RGLFGLPAPG TTPSDYYHQM
TLVAGHPAPY GDLLMQSGGA ASAPHLHDYL NPVDVSRFSS PRVTPRLSRK RALSISPLSD
ASLDLQRMIR TSPNSLVAYI NNSRSSSAAS GSYGHLSAGA LSPAFTFPHP INPVAYQQIL
SQQRGLGSAF GHTPPLIQPS PTFLAQQMA LTSINATPTQ LSSSSNCLSD TNQNKQSSS
AVSSTVNPVA IHKRSKVKTE PEGLRPASPL ALTQGQVSGH GSCGCALPLS QEQLADLKED
LDRDDCKQEA EVVIYETNCH WEDCTKEYDT QEQLVHHINN EHIHGKKEF VCRWQACTRE
QKPFKAQYML VVHMRRHTGE KPHKCTFEGC SKAYSRLLENL KTHLRSHTGE KPYVCEHEGC
NKAFSNASDR AKHQNRTHSN EKPYICKIPG CTKRYTDPSS LRKHVKTVHG PDAHVTKKQR
NDVHLRTPLL KENGSEAGT EPGGPESTE SSTSQAVEDC LHVRAIKTES SGLCQSSPGA
QSSCSSESP LGSAPNND SG VEMPGTGP GS LGDLTALDDT PPGADTSALA APSAGGLQLR

KHMTTMHRFE QLKKEKLKSL KDSCSWAGPT PHTRNTKLPP LPGSGSILEN FSGSGGGGPA
GLLPNPRLSE LSASEVTMLS QLQERRDSST STVSSAYTVS RRSSGISPYF SSRRSSEASP
LGAGRPHNAS SADSYPDIST DASRRSSEAS QCSGGGGLLN LTPAQYSLR AKYAAATGGP
PPTPLPLGLER MSLRTRLALL DAPERTLPAG CPRPLGPRRG SDGPTYGHGH AGAAPAFPH
APGGGARRAS DPVRRPDALS LPRVQRFHST HNVNPGPLPP CADRRGLRLQ SHPSTDGGLA
RGAYSPRPPS ISENVAMEAV AAGVDGAGPE ADLGLPEDDL VLPDDVVQYI KAHASGALDE
GTGQVYPTES TGFSDNPRLP SPGLHGQRRM VAADSNVGPS APMLGGCQLG FGAPSSLNKN
NMPVQWNEVS SGTVDALASQ VKPPFPQGN LAVVQKPAF GQYPGYSPQG LQASPGGLDS
TQPHLQPRSG APSQGIPRVN YMQQLRQVA GSQCPCGTTTT MSPHACYGQV HPQLSPSTIS
GALNQFPQSC SNMPAKPGHL GHPQQTEVAP DPTTMGNRHR ELGVPDSALA GVPPPHVQS
YPQQSHHLAA SMSQEGYHVV PSLPARQPG FMEPQTGPMG VATAGFGLVQ PRPPLEPSPT
GRHRGVRAVQ QQLAYARATG HAMAAMPSSQ ETAEAVPKGA MGNMGSVPPQ PPPQDAGGAP
DHSMYYYYGQ IHMYEQDGL ENLGSCQVMR SQPPQPACQ DSIQPQLPS PGVNQVSSV
DSQLLEAPQI DFDAIMDDGD HSSLFSGALS PSLHLSLQSN SSRLTTPRNS LTLPSIPAGI
SNMAVGDMSS MLTSLAEESK FLNMMT

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-

Product Details

translational modifications.

- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- 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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	GLI2
Alternative Name:	GLI2 (GLI2 Products)
Background:	Zinc finger protein GLI2 (GLI family zinc finger protein 2) (Tax helper protein),FUNCTION: Functions as a transcription regulator in the hedgehog (Hh) pathway (PubMed:18455992, PubMed:26565916). Functions as a transcriptional activator (PubMed:9557682, PubMed:19878745, PubMed:24311597). May also function as transcriptional repressor (By similarity). Requires STK36 for full transcriptional activator activity. Required for normal embryonic development (PubMed:15994174, PubMed:20685856). {ECO:0000250 UniProtKB:Q0VGT2, ECO:0000269 PubMed:15994174,

Target Details

ECO:0000269|PubMed:18455992, ECO:0000269|PubMed:19878745,
ECO:0000269|PubMed:24311597, ECO:0000269|PubMed:26565916,
ECO:0000269|PubMed:9557682, ECO:0000305|PubMed:20685856}, FUNCTION: [Isoform 1]:
Involved in the smoothened (SHH) signaling pathway. {ECO:0000269|PubMed:18455992},
FUNCTION: [Isoform 2]: Involved in the smoothened (SHH) signaling pathway.
{ECO:0000269|PubMed:18455992}, FUNCTION: [Isoform 3]: Involved in the smoothened (SHH)
signaling pathway. {ECO:0000269|PubMed:18455992}, FUNCTION: [Isoform 4]: Involved in the
smoothened (SHH) signaling pathway. {ECO:0000269|PubMed:18455992}, FUNCTION:
[Isoform 1]: Acts as a transcriptional activator in T-cell leukemia virus type 1 (HTLV-1)-infected
cells in a Tax-dependent manner. Binds to the DNA sequence 5'-GAACCACCCA-3' which is part
of the Tax-responsive element (TRE-2S) regulatory element that augments the Tax-dependent
enhancer of HTLV-1 (PubMed:9557682). {ECO:0000269|PubMed:15994174,
ECO:0000269|PubMed:9557682}, FUNCTION: [Isoform 2]: (Microbial infection) Acts as a
transcriptional activators in T-cell leukemia virus type 1 (HTLV-1)-infected cells in a Tax-
dependent manner. Binds to the DNA sequence 5'-GAACCACCCA-3' which is part of the Tax-
responsive element (TRE-2S) regulatory element that augments the Tax-dependent enhancer of
HTLV-1 (PubMed:9557682). {ECO:0000269|PubMed:15994174,
ECO:0000269|PubMed:9557682}, FUNCTION: [Isoform 3]: (Microbial infection) Acts as a
transcriptional activators in T-cell leukemia virus type 1 (HTLV-1)-infected cells in a Tax-
dependent manner. Binds to the DNA sequence 5'-GAACCACCCA-3' which is part of the Tax-
responsive element (TRE-2S) regulatory element that augments the Tax-dependent enhancer of
HTLV-1 (PubMed:9557682). {ECO:0000269|PubMed:15994174,
ECO:0000269|PubMed:9557682}, FUNCTION: [Isoform 4]: (Microbial infection) Acts as a
transcriptional activators in T-cell leukemia virus type 1 (HTLV-1)-infected cells in a Tax-
dependent manner. Binds to the DNA sequence 5'-GAACCACCCA-3' which is part of the Tax-
responsive element (TRE-2S) regulatory element that augments the Tax-dependent enhancer of
HTLV-1 (PubMed:9557682). {ECO:0000269|PubMed:15994174,
ECO:0000269|PubMed:9557682}, FUNCTION: [Isoform 5]: Acts as a transcriptional repressor.
{ECO:0000269|PubMed:15994174}.

Molecular Weight: 167.8 kDa

UniProt: [P10070](#)

Pathways: [Hedgehog Signaling, Dopaminergic Neurogenesis](#)

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: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



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