



[Go to Product page](#)

Datasheet for ABIN3116029

GPR155 Protein (AA 1-870) (Strep Tag)

1 Image

Overview

| | |
|-------------------------------|---|
| Quantity: | 1 mg |
| Target: | GPR155 |
| Protein Characteristics: | AA 1-870 |
| Origin: | Human |
| Source: | Tobacco (<i>Nicotiana tabacum</i>) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This GPR155 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

Product Details

Sequence: MNSNLPAENL TIAVNMTKTL PTAVTHGFNS TNDPPSMSIT RLFALLECF GIVLCGYIAG
RANVITSTQA KGLGNFVSRF ALPALLFKNM VVLNFSNVDW SFLYSILIAK ASVFFIVCVL
TLLVASPDSR FSKAGLFFIF ATQSNDFALG YPIVEALYQT TYPEYLQYIY LVAPISLMML
NPIGFIFCEI QKWKDTQNAS QNKIKIVGLG LLRVLQNPV FMVFIGIAFN FILDRKVPVY
VENFLDGLGN SFSGSALFYI GLTMVGKIKR LKKSFAVVLV LLITAKLLVL PLLCREMVEL
LDKGDSVVNH TSLSNYAFYI GVFPVAPGVA IFATQFNMEV EIITSGMVIS TFVSAPIMYV
SAWLLTFPTM DPKPLAYAIQ NVSFDISIVS LISLIWSLAI LLLSKKYKQL PHMLTTNLLI
AQSIVCAGMM IWNFVKEKNF VGQILVFVLL YSSLYSTYLW TGLLAISLFL LKKRERVQIP
VGIISGWG IPALLVGVLL ITGKHNGDSI DSAFFYGKEQ MITTAVTLFC SILIAGISLM
CMNQTAQAGS YEGFDQSQSH KVVVEPGNTAF EESPAPVNEP ELFTSSIPET SCCSCSMGNG
ELHCPSIEPI ANTSTSEPMV PSFEKNNHCV SRCNSQSCIL AQEEEEYLQS GDQQLTRHVL
LCLLLIIGLF ANLSSCLWWL FNQEPGRLYV ELQFFCAVFN FGQGFISFGI FGLDKHLIIL

PFKRRLEFLW NNKDTAENRD SPVSEEIKMT CQQFIHYHRD LCIRNIVKER RCGAKTSAGT
FCGCDLVSWL IEVGLASDRG EAVIYGDRLV QGGVIQHITN EYEFRDEYLF YRFLQKSPEQ
SPPAINANTL QQERYKEIEH SSPPSHSPKT

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-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.

Product Details

| | |
|------------------|--|
| 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: | GPR155 |
| Alternative Name: | GPR155 (GPR155 Products) |
| Background: | Lysosomal cholesterol signaling protein (LYCHOS) (G-protein coupled receptor PGR22),FUNCTION: Cholesterol-binding protein that acts as a regulator of mTORC1 signaling pathway (PubMed:36007018). Acts as a sensor of cholesterol to signal cholesterol sufficiency to mTORC1: in presence of cholesterol, binds cholesterol, leading to disrupt interaction between the GATOR1 and KICSTOR complexes and promote mTORC1 signaling (PubMed:36007018). Upon cholesterol starvation, GPR155/LYCHOS is unable to perturb the association between GATOR1 and KICSTOR, leading to mTORC1 signaling inhibition (PubMed:36007018). {ECO:0000269 PubMed:36007018}. |
| Molecular Weight: | 96.9 kDa |
| UniProt: | Q7Z3F1 |

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 <i>Nicotiana tabacum</i> 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 |

Application Details

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)

Images



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