Datasheet for ABIN3097315

Angiotensin II Type-1 Receptor Protein (AA 1-359) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	Angiotensin II Type-1 Receptor (AGTR1)
Protein Characteristics:	AA 1-359
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Angiotensin II Type-1 Receptor protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MILNSSTEDG IKRIQDDCPK AGRHNYIFVM IPTLYSIIFV VGIFGNSLVV IVIYFYMKLK TVASVFLLNL ALADLCFLLT LPLWAVYTAM EYRWPFGNYL CKIASASVSF NLYASVFLLT CLSIDRYLAI VHPMKSRLRR TMLVAKVTCI IIWLLAGLAS LPAIIHRNVF FIENTNITVC AFHYESQNST LPIGLGLTKN ILGFLFPFLI ILTSYTLIWK ALKKAYEIQK NKPRNDDIFK IIMAIVLFFF FSWIPHQIFT FLDVLIQLGI IRDCRIADIV DTAMPITICI AYFNNCLNPL FYGFLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE **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:

Product Details

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	Angiotensin II Type-1 Receptor (AGTR1)

Target Details

Alternative Name:	AGTR1 (AGTR1 Products)
Background:	Type-1 angiotensin II receptor (AT1AR) (AT1BR) (Angiotensin II type-1 receptor) (AT1 receptor),FUNCTION: Receptor for angiotensin II, a vasoconstricting peptide, which acts as a key regulator of blood pressure and sodium retention by the kidney (PubMed:1567413, PubMed:8987975, PubMed:15611106, PubMed:25913193, PubMed:26420482, PubMed:30639100, PubMed:32079768). The activated receptor in turn couples to G-alpha proteins G(q) (GNAQ, GNA11, GNA14 or GNA15) and thus activates phospholipase C and increases the cytosolic Ca(2+) concentrations, which in turn triggers cellular responses such as stimulation of protein kinase C (PubMed:15611106). {ECO:0000269|PubMed:15611106, ECO:0000269|PubMed:1567413, ECO:0000269|PubMed:25913193, ECO:0000269|PubMed:26420482, ECO:0000269|PubMed:30639100, ECO:0000269|PubMed:32079768, ECO:0000269|PubMed:8987975}., FUNCTION: (Microbial infection) During SARS coronavirus-2/SARS-CoV-2 infection, it is able to recognize and internalize the complex formed by secreted ACE2 and SARS-CoV-2 spike protein through DNM2/dynamin 2-dependent endocytosis. {ECO:0000269|PubMed:33713620}.
Molecular Weight:	41.1 kDa
UniProt:	P30556
Pathways:	JAK-STAT Signaling, ACE Inhibitor Pathway, Regulation of Systemic Arterial Blood Pressure by Hormones, Feeding Behaviour

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

Application Details

	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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months