Datasheet for ABIN3133839

GPR3 Protein (AA 1-330) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	GPR3
Protein Characteristics:	AA 1-330
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPR3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MMWGAGSSMA WFSAGSGSVN VSSVDPVEEP TGPATLLPSP RAWDVVLCIS GTLVSCENAL VVAIIVGTPA FRAPMFLLVG SLAVADLLAG LGLVLHFAAD FCIGSPEMSL MLVGVLAMAF TASIGSLLAI TVDRYLSLYN ALTYYSETTV TRTYVMLALV WVGALGLGLV PVLAWNCRDG LTTCGVVYPL SKNHLVVLAI AFFMVFGIML QLYAQICRIV CRHAQQIALQ RHLLPASHYV ATRKGIATLA VVLGAFAACW LPFTVYCLLG DADSPRLYTY LTLLPATYNS MINPVIYAFR NQDVQKVLWA ICCCCSTSKI PFRSRSPSDV **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:	GPR3

Target Details

Alternative Name:	Gpr3 (GPR3 Products)
Background:	G-protein coupled receptor 3 (GPCR21),FUNCTION: Constitutively active G-protein coupled receptor that maintains high 3'-5'-cyclic adenosine monophosphate (cAMP) levels that a plays a role in serveral processes including meiotic arrest in oocytes or neuronal development via activation of numerous intracellular signaling pathways (PubMed:15956199, PubMed:19259266). Acts as an essential activator of thermogenic adipocytes and drives thermogenesis via its intrinsic G(s)-coupling activity without the requirement of a ligand (PubMed:26455425, PubMed:34048700). Has a potential role in modulating a number of brain functions, including behavioral responses to stress, amyloid-beta peptide generation in neurons. Stimulates neurite outgrowth in cerebellar granular neurons modulated via PKA, ERK, and most strongly PI3K-mediated signaling pathways (PubMed:34871769). {ECO:0000269|PubMed:15956199, ECO:0000269|PubMed:19259266, ECO:0000269|PubMed:26455425, ECO:0000269|PubMed:34048700, ECO:0000269|PubMed:34871769}.
Molecular Weight:	35.5 kDa
UniProt:	P35413
Pathways:	cAMP Metabolic Process

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. 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