Datasheet for ABIN3114713

GPR50 Protein (AA 1-617) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	GPR50
Protein Characteristics:	AA 1-617
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPR50 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MGPTLAVPTP YGCIGCKLPQ PEYPPALIIF MFCAMVITIV VDLIGNSMVI LAVTKNKKLR NSGNIFVVSL SVADMLVAIY PYPLMLHAMS IGGWDLSQLQ CQMVGFITGL SVVGSIFNIV AIAINRYCYI CHSLQYERIF SVRNTCIYLV ITWIMTVLAV LPNMYIGTIE YDPRTYTCIF NYLNNPVFTV TIVCIHFVLP LLIVGFCYVR IWTKVLAARD PAGQNPDNQL AEVRNFLTMF VIFLLFAVCW CPINVLTVLV AVSPKEMAGK IPNWLYLAAY FIAYFNSCLN AVIYGLLNEN FRREYWTIFH AMRHPIIFFS GLISDIREMQ EARTLARARA HARDQAREQD RAHACPAVEE TPMNVRNVPL PGDAAAGHPD RASGHPKPHS RSSSAYRKSA STHHKSVFSH SKAASGHLKP VSGHSKPASG HPKSATVYPK PASVHFKADS VHFKGDSVHF KPDSVHFKPA SSNPKPITGH HVSAGSHSKS AFSAATSHPK PTTGHIKPAT SHAEPTTADY PKPATTSHPK PTAADNPELS ASHCPEIPAI AHPVSDDSDL PESASSPAAG PTKPAASQLE SDTIADLPDP TVVTTSTNDY HDVVVIDVED DPDEMAV

Product Details

	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 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).

Product Details

Grade:	custom-made

Target Details

Target:	GPR50
Alternative Name:	GPR50 (GPR50 Products)
Background:	Melatonin-related receptor (G protein-coupled receptor 50) (H9) [Cleaved into: C-terminal domain],FUNCTION: G protein-coupled receptor that plays a role in numerous physiological processes including regulation of energy metabolism, neurite outgrowth or cell migration (PubMed:19699797). Promotes self-renewal and neuronal differentiation of neural progenitor cells through activation of the NOTCH and WNT/beta-catenin signaling pathways (By similarity). Modulates the KAT5-dependent glucocorticoid receptor signaling by modulating KAT5 subcellular compartmentalisation (PubMed:21858214). Plays also a role in the activation TGFBR1 in the absence of TGFBR2 by interfering with FKBP1A binding to TGFBR1, leading to induction of both canonical and non-canonical SMAD signaling pathways resulting in inhibition of proliferation or promotion of migration (PubMed:29572483). {ECO:0000250|UniProtKB:O88495, ECO:0000269|PubMed:16778767, ECO:0000269|PubMed:19699797, ECO:0000269|PubMed:21858214, ECO:0000269|PubMed:29572483}., FUNCTION: [C-terminal domain]: Upon cleavage by CAPN1, functions as a scaffold in the nucleus for interacting partners such as GTF2I to promote FOS promoter activation. {ECO:0000250|UniProtKB:O88495, ECO:0000269|PubMed:19699797, ECO:0000269|PubMed:21858214, ECO:0000269|PubMed:31900622}.
Molecular Weight:	67.4 kDa
UniProt:	Q13585

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

Application Details

	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