Datasheet for ABIN3128146

ABCG5 Protein (AA 1-652) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ABCG5
Protein Characteristics:	AA 1-652
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ABCG5 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MGELPFLSPE GARGPHINRG SLSSLEQGSV TGTEARHSLG VLHVSYSVSN RVGPWWNIKS CQQKWDRQIL KDVSLYIESG QIMCILGSSG SGKTTLLDAI SGRLRRTGTL EGEVFVNGCE LRRDQFQDCF SYVLQSDVFL SSLTVRETLR YTAMLALCRS SADFYNKKVE AVMTELSLSH VADQMIGSYN FGGISSGERR RVSIAAQLLQ DPKVMMLDEP TTGLDCMTAN QIVLLLAELA RRDRIVIVTI HQPRSELFQH FDKIAILTYG ELVFCGTPEE MLGFFNNCGY PCPEHSNPFD FYMDLTSVDT QSREREIETY KRVQMLECAF KESDIYHKIL ENIERARYLK TLPTVPFKTK DPPGMFGKLG VLLRRVTRNL MRNKQAVIMR LVQNLIMGLF LIFYLLRVQN NTLKGAVQDR VGLLYQLVGA TPYTGMLNAV NLFPMLRAVS DQESQDGLYH KWQMLLAYVL HVLPFSVIAT VIFSSVCYWT LGLYPEVARF GYFSAALLAP HLIGEFLTLV LLGIVQNPNI VNSIVALLSI SGLLIGSGFI RNIQEMPIPL KILGYFTFQK YCCEILVVNE FYGLNFTCGG SNTSMLNHPM CAITQGVQFI EKTCPGATSR FTANFLILYG FIPALVILGI VIFKVRDYLI SR

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:	ABCG5
Alternative Name:	Abcg5 (ABCG5 Products)
Background:	ATP-binding cassette sub-family G member 5 (EC 7.6.2.-) (Sterolin-1),FUNCTION: ABCG5 and ABCG8 form an obligate heterodimer that mediates Mg(2+)- and ATP-dependent sterol transport across the cell membrane (PubMed:16352607, PubMed:16867993, PubMed:18402465). Plays an essential role in the selective transport of dietary plant sterols and cholesterol in and out of the enterocytes and in the selective sterol excretion by the liver into bile (PubMed:12444248, PubMed:14504269, PubMed:14657202, PubMed:19846887, PubMed:25378657). Required for normal sterol homeostasis (PubMed:12444248, PubMed:14657202). The heterodimer with ABCG8 has ATPase activity (PubMed:16352607, PubMed:16867993). {ECO:0000269|PubMed:12444248, ECO:0000269|PubMed:14504269, ECO:0000269|PubMed:14657202, ECO:0000269|PubMed:16352607, ECO:0000269|PubMed:16867993, ECO:0000269|PubMed:18402465, ECO:0000269|PubMed:19846887, ECO:0000269|PubMed:25378657}.
Molecular Weight:	73.2 kDa
UniProt:	Q99PE8
Pathways:	Lipid Metabolism

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

Application Details

	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