Datasheet for ABIN3135159

SPIRE1 Protein (AA 1-598) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SPIRE1
Protein Characteristics:	AA 1-598
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SPIRE1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MANTVEADGS KDEGYEAADE GPEDEDGEKR SISAIRSYQD VMKICAAHLP TESEAPNHYQ AVCRALFAET MELHTFLTKI KSAKENLKKI QEMEKGDESS TDLEDLKNAD WARFWVQVMR DLRNGVKLKK VQQRQYNPLP IEYQLTPYEM LMDDIRCKRY TLRKVMVNGD VPPRLKKSAH EVILDFIRSR PPLNPVSARK LKPTPPRPRS LHERILEEIK AERKLRPVSP EEIRRSRLVR PLSMSHSFDL SDVTTPESPK NVGESSMVNG GLTSQTKENG LSAAQQGSAQ RKRLLKAPTL AELDSSDSEE EKSLHKSTSS SSASPSLYED PVLEAMCSRK KPPKFLPISS TPQPERRQPP QRRHSIEKET PTNVRQFLPP SRQSSRSLEE FCYPVECLAL TVEEVMHIRQ VLVKAELEKY QQYKDVYTAL KKGKLCFCCR TRRFSFFTWS YTCQFCKRPV CSQCCKKMRL PSKPYSTLPI FSLGPSALQR GESCSRSEKP STSHHRPLRS IARFSTKSRS VDKSDEELQF PKELMEDWST MEVCVDCKKF ISEIISSSRR SLVLANKRAR LKRKTQSFYM SSAGPSEYCP SERTINEI **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).
Grade:	custom-made

Target Details

Target:	SPIRE1
Alternative Name:	Spire1 (SPIRE1 Products)
Background:	Protein spire homolog 1,FUNCTION: Acts as an actin nucleation factor, remains associated with the slow-growing pointed end of the new filament. Involved in intracellular vesicle transport along actin fibers, providing a novel link between actin cytoskeleton dynamics and intracellular transport (PubMed:21983562). Required for asymmetric spindle positioning and asymmetric cell division during meiosis. Required for normal formation of the cleavage furrow and for polar body extrusion during female germ cell meiosis (PubMed:21620703). Also acts in the nucleus: together with FMN2, promotes assembly of nuclear actin filaments in response to DNA damage in order to facilitate movement of chromatin and repair factors after DNA damage. In addition, promotes innate immune signaling downstream of dsRNA sensing. Mechanistically, contributes to IRF3 phosphorylation and activation downstream of MAVS and upstream of TBK1. {ECO:0000250|UniProtKB:Q08AE8, ECO:0000269|PubMed:21620703, ECO:0000269|PubMed:21983562}.
Molecular Weight:	68.5 kDa
UniProt:	Q52KF3

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