Datasheet for ABIN3127435

FLVCR2 Protein (AA 1-551) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	FLVCR2
Protein Characteristics:	AA 1-551
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FLVCR2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MVNESLNQEE SNDRPAPESE FQMDTSYSTQ PSGSIHPSVS GHPSVSGHPS VSGHPSVSIH PSVSIDPSVS VRPSSSALPS TLAQPSGLTH HSSLVREDSV IKVSKRRWVV VLVFSCYSLC NAFQWIQYGS INNIFMNFYG VSAFAIDWLS MCYMLTYIPL LLPVAWMLEK FGLRTIAITG SALNCLGAWV KLGSLEPHLF PVTMVGQVIC SVAQVFILGM PSRIASVWFG ADEVSTACSV AVFGNQLGIA IGFLVPPVLV PNIKDPEKLA YHISIMFYII GGVATFLFIL VIIVFKEKPK HPPSRAQSLS YALATTDASY LSSIVRLFKN LNFVLLVITY GLNAGAFYAL STLLNRMVIL HFPGEEVNAG RIGLTIVIAG MFGAMISGIW LDKSKTYKET TLVVYIMTLV GMVVYTFTLN LNHLWIVFIT AGTLGFFMTG YLPLGFEFAV EFTYPESEGV SSGLLNVSAQ VFGIVFTISQ GQIIDNHGTM FGNIFLCVFL ALGSALTAFI KSDLRRQRAN KDAPETKVQE EEEEEEGSNT SKVPVVSEAH L **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:	FLVCR2
Alternative Name:	Flvcr2 (FLVCR2 Products)
Background:	Heme transporter FLVCR2 (Calcium-chelate transporter) (CCT) (Feline leukemia virus subgroup C receptor-related protein 2) (Major facilitator superfamily domain containing 7C),FUNCTION: Putative heme b importer/sensor involved in heme homeostasis in response to the metabolic state of the cell and to diet. May act as a sensor of cytosolic and/or mitochondrial heme levels to regulate mitochondrial respiration processes, ATP synthesis and thermogenesis. At low heme levels, interacts with components of electron transfer chain (ETC) complexes and ATP2A2, leading to ubiquitin-mediated degradation of ATP2A2 and inhibition of thermogenesis. Upon heme binding, dissociates from ETC complexes to allow switching from mitochondrial ATP synthesis to thermogenesis. Alternatively, in coordination with ATP2A2 may mediate calcium transport and signaling in response to heme. {ECO:0000250|UniProtKB:Q9UPI3, ECO:0000269|PubMed:32973183}.
Molecular Weight:	60.1 kDa
UniProt:	Q91X85

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