Datasheet for ABIN3119521

FLVCR Protein (AA 1-555) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	FLVCR (FLVCR1)
Protein Characteristics:	AA 1-555
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FLVCR protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:

MARPDDEEGA AVAPGHPLAK GYLPLPRGAP VGKESVELQN GPKAGTFPVN GAPRDSLAAA SGVLGGPQTP LAPEEETQAR LLPAGAGAET PGAESSPLPL TALSPRRFVV LLIFSLYSLV NAFQWIQYSI ISNVFEGFYG VTLLHIDWLS MVYMLAYVPL IFPATWLLDT RGLRLTALLG SGLNCLGAWI KCGSVQQHLF WVTMLGQCLC SVAQVFILGL PSRIASVWFG PKEVSTACAT AVLGNQLGTA VGFLLPPVLV PNTQNDTNLL ACNISTMFYG TSAVATLLFI LTAIAFKEKP RYPPSQAQAA LQDSPPEEYS YKKSIRNLFK NIPFVLLLIT YGIMTGAFYS VSTLLNQMIL TYYEGEEVNA GRIGLTLVVA GMVGSILCGL WLDYTKTYKQ TTLIVYILSF IGMVIFTFTL DLRYIIIVFV TGGVLGFFMT GYLPLGFEFA VEITYPESEG TSSGLLNASA QIFGILFTLA QGKLTSDYGP KAGNIFLCVW MFIGIILTAL IKSDLRRHNI NIGITNVDVK AIPADSPTDQ EPKTVMLSKQ SESAI

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.

Product Details

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and

Product Details

	Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	FLVCR (FLVCR1)
Alternative Name:	FLVCR1 (FLVCR1 Products)
Background:	Heme transporter FLVCR1 (Feline leukemia virus subgroup C receptor-related protein 1) (Feline leukemia virus subgroup C receptor) (hFLVCR),FUNCTION: [Isoform 1]: Heme b transporter that mediates heme efflux from the cytoplasm to the extracellular compartment. Heme export depends on the presence of HPX and is required to maintain intracellular free heme balance, protecting cells from heme toxicity. Heme export provides protection from heme or ferrous iron toxicities in liver, brain, sensory neurons and during erythropoiesis, a process in which heme synthesis intensifies. Possibly export coproporphyrin and protoporphyrin IX, which are both intermediate products in the heme biosynthetic pathway. Does not export bilirubin. The molecular mechanism of heme transport, whether electrogenic, electroneutral or coupled to other ions, remains to be elucidated. {ECO:0000269|PubMed:15369674, ECO:0000269|PubMed:20610401, ECO:0000269|PubMed:23187127, ECO:0000269|PubMed:27923065}., FUNCTION: [Isoform 1]: (Microbial infection) Confers susceptibility to feline leukemia virus subgroup C (FeLV-C) infection in vitro. {ECO:0000269|PubMed:10400745}., FUNCTION: [Isoform 2]: Heme b transporter that promotes heme efflux from the mitochondrion to the cytoplasm. Essential for erythroid differentiation. {ECO:0000269|PubMed:23187127}.
Molecular Weight:	59.9 kDa
UniProt:	Q9Y5Y0
Pathways:	Transition Metal Ion Homeostasis

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

Application Details

	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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

