

## Datasheet for ABIN3092625

# FRMD4A Protein (AA 1-1039) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	FRMD4A
Protein Characteristics:	AA 1-1039
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FRMD4A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MAVQLVPDSA LGLLMMTEGR RCQVHLLDDR KLELLVQPKL LAKELLDLVA SHFNLKEKEY
	FGIAFTDETG HLNWLQLDRR VLEHDFPKKS GPVVLYFCVR FYIESISYLK DNATIELFFL
	NAKSCIYKEL IDVDSEVVFE LASYILQEAK GDFSSNEVVR SDLKKLPALP TQALKEHPSL
	AYCEDRVIEH YKKLNGQTRG QAIVNYMSIV ESLPTYGVHY YAVKDKQGIP WWLGLSYKGI
	FQYDYHDKVK PRKIFQWRQL ENLYFREKKF SVEVHDPRRA SVTRRTFGHS GIAVHTWYAC
	PALIKSIWAM AISQHQFYLD RKQSKSKIHA ARSLSEIAID LTETGTLKTS KLANMGSKGK
	IISGSSGSLL SSGSQESDSS QSAKKDMLAA LKSRQEALEE TLRQRLEELK KLCLREAELT
	GKLPVEYPLD PGEEPPIVRR RIGTAFKLDE QKILPKGEEA ELERLEREFA IQSQITEAAR
	RLASDPNVSK KLKKQRKTSY LNALKKLQEI ENAINENRIK SGKKPTQRAS LIIDDGNIAS
	EDSSLSDALV LEDEDSQVTS TISPLHSPHK GLPPRPPSHN RPPPPQSLEG LRQMHYHRND
	YDKSPIKPKM WSESSLDEPY EKVKKRSSHS HSSSHKRFPS TGSCAEAGGG SNSLQNSPIR

GLPHWNSQSS MPSTPDLRVR SPHYVHSTRS VDISPTRLHS LALHFRHRSS SLESQGKLLG SENDTGSPDF YTPRTRSSNG SDPMDDCSSC TSHSSSEHYY PAQMNANYST LAEDSPSKAR QRQRQRAA GALGSASSGS MPNLAARGGA GGAGGAGGGV YLHSQSQPSS QYRIKEYPLY IEGGATPVVV RSLESDQEGH YSVKAQFKTS NSYTAGGLFK ESWRGGGGDE GDTGRLTPSR SQILRTPSLG REGAHDKGAG RAAVSDELRQ WYQRSTASHK EHSRLSHTSS TSSDSGSQYS TSSQSTFVAH SRVTRMPQMC KATSAALPQS QRSSTPSSEI GATPPSSPHH ILTWQTGEAT ENSPILDGSE SPPHQSTDE

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 posttranslational 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: FRMD4A Alternative Name: FRMD4A (FRMD4A Products) Background: FERM domain-containing protein 4A, FUNCTION: Scaffolding protein that regulates epithelial cell polarity by connecting ARF6 activation with the PAR3 complex (By similarity). Plays a redundant role with FRMD4B in epithelial polarization (By similarity). May regulate MAPT secretion by activating ARF6-signaling (PubMed:27044754). {ECO:0000250|UniProtKB:Q8BIE6, ECO:0000269|PubMed:27044754}. Molecular Weight: 115.5 kDa UniProt: Q9P2Q2 **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

# **Application Details**

	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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months