

Datasheet for ABIN3136697

## RAPGEF3 Protein (AA 1-918) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	RAPGEF3
Protein Characteristics:	AA 1-918
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAPGEF3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MKVSWPGENH WQVGPAVVES PAVGAPQVGG LPDVVPEGTL LNMVLKRMHR PRCCSYQLVF</p> <p>EHRRPSCIQG LRWTPLTNSE DSLDFRVSL E QATTEHVHKA GKLLHRHLLA TYPTLIRDRK</p> <p>YHLRLYRHCC SGRELVDGIL ALGLGVHSRS QAVGICQVLL DEGALCHVKH DWTFQDRDAQ</p> <p>FYRFPGPEPE PTGTQDVEEE LVEAMALLSQ RGPDALLTVA LRKPPGQRTD EELDLIFEEL</p> <p>LHIKAVAHLS NSVKRELA AV LLFEPHSKAG TVLFSQGDKG TSWYIIWKGS VNVVTHGKGL</p> <p>VTTLHEGDDF GQLALVNDAP RAATIILREN NCHFLRVDKQ DFNRIIKDVE AKTMRLEE HG</p> <p>KVVLVLERTS QGAGPSRPPT PGRNRYTVMS GTPEKILELL LEAMRPDSSA HDPTETFLSD</p> <p>FLLTHSVFMP STQLFTALLH HFHVEPADPA GGSEQEHSTY ICNKRQQILR LVGRWVALYS</p> <p>PMLHSDPVAT SFLQKLSDLV SRDARLSNLL REQYPERRRH HRENGCGNV SPQTKARNAP</p> <p>VWLPNQEEPL PSSAGAIRVG DKVPYDICRP DHSVLT LHL P VTASVREVMA ALAHEDHWTK</p> <p>GQVLVKVNSA GDVVGLQPD A RGVATSLGLN ERLFVVD PQE VHELTPHPEQ LGPTLGSSEM</p>

LDLVS AKDLA GQLTDH DWNL FNRIHQVQEH LRDVTTANLE RFMRRFNELQ YWVATELCCLC  
PVPGSRAQLL RKFIKLA AHL KEQKNLNSFF AVMFGLSNSA ISRLAHTWER LPHKVRKLYS  
ALERLLDPSW NHRVYRLALT KLSPPVIPFM PLLLKDVTFI HEGNHTLVEN LINFEKMRMM  
ARAVRMLHHC RSHSTAPLSP LRSRVSHIHE DSQGSRISTC SEQSLSTRSP ASTWAYVQQL  
KVIDNQRELS RLSRELEP

**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.**

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### 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.

## Product Details

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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

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Target:	RAPGEF3
Alternative Name:	Rapgef3 ( <a href="#">RAPGEF3 Products</a> )
Background:	<p>Rap guanine nucleotide exchange factor 3 (Exchange factor directly activated by cAMP 1) (Exchange protein directly activated by cAMP 1) (EPAC 1) (cAMP-regulated guanine nucleotide exchange factor I) (cAMP-GEFI),FUNCTION: Guanine nucleotide exchange factor (GEF) for RAP1A and RAP2A small GTPases that is activated by binding cAMP. Through simultaneous binding of PDE3B to RAPGEF3 and PIK3R6 is assembled in a signaling complex in which it activates the PI3K gamma complex and which is involved in angiogenesis. Plays a role in the modulation of the cAMP-induced dynamic control of endothelial barrier function through a pathway that is independent on Rho-mediated signaling. Required for the actin rearrangement at cell-cell junctions, such as stress fibers and junctional actin (By similarity). {ECO:0000250}.</p>
Molecular Weight:	103.5 kDa
UniProt:	<a href="#">Q8VCC8</a>
Pathways:	<a href="#">cAMP Metabolic Process</a>

## Application Details

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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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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</p>

Application Details

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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