

## Datasheet for ABIN3123434

# Microrchidia 2A Protein (MORC2A) (AA 1-1030) (Strep Tag)



Go to Product page

Overviev	

Quantity:	250 μg
Target:	Microrchidia 2A (MORC2A)
Protein Characteristics:	AA 1-1030
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Microrchidia 2A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details		
Brand:	AliCE®	
Sequence:	MAFTNYSSLN RAQLTFEYLH TNSTTHEFLF GALAELVDNA RDADATRIDI YAERREDLRG	
	GFMLCFLDDG AGMDPSDAAS VIQFGKSAKR TPESTQIGQY GNGLKSGSMR IGKDFILFTK	
	KEDTMTCLFL SRTFHEEEGI DEVIVPLPTW NARTREPITD NVEKFAIETE LVYKYSPFHT	
	EEQVMNQFMK IPGNSGTLVI IFNLKLMDNG EPELDIISNP KDIQMAETSP EGTKPERRSF	
	RAYAAVLYID PRMRIFIHGH KVQTKRLSCC LYKPRMYKYT SSRFKTRAEQ EVKKAEHVAR	
	IAEEKAREAE SKARTLEVRM GGDLTRDSRV MLRQVQNTAI TLRREADVKK RIKDAKQRAL	
	KEPKELNFVF GVNIEHRDLD GMFIYNCSRL IKMYEKVGPQ LEGGMACGGV VGVVDVPYLV	
	LEPTHNKQDF ADAKEYRHLL RAMGEHLAQY WKDIAIAQRG IIKFWDEFGY LSANWNQPPS	
	SELRFKRRRA MEIPTTIQCD LCLKWRTLPF QLSSVETDYP DTWVCSMNPD PEQDRCEASE	
	QKQKVPLGTL KKDPKTQEEK QKQLTEKIRQ QQEKLEALQK TTPIRSQADL KKLPLEVTTR	
	PIEEPVRRPQ RPRSPPLPAV IKNAPSRPPS IQTPRPSTQL RKTSVISLPK PPTTAARGET	

STSRLLQPTE APRKPANPPI KTVPRPTPPV HTPPLSLIPS SKSLREVPAQ KAIKTPVVKK
PEPPVKQSVA TSGRKRSLAV SDEEEAEEEA EKRRERCKRG KLAVKEEKKE ANELSDSAGE
DHPAELRKAQ KDKGLHVEVR VNREWYTGRV TAVEVGKNAV RWKVKFDYVP TDTTPRDRWV
EKGSEDVRLM KPPSPEHQSP DTQQEGGEEE EAMVARQAVA LPEPSTSDGL PIEPDTTATS
PSHETIDLLV QILRNCLRYF LPPSFPISKK ELSVMNSEEL ISFPLKEYFK QYEVGLQNLC
HSYQSRADSR AKASEESLRT SEKKLRETEE KLQKLRTNIV ALLQKVQEDI DINTDDELDA
YIEDLITKGD

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: Microrchidia 2A (MORC2A) Alternative Name: Morc2a Background: ATPase MORC2A (EC 3.6.1.-) (MORC family CW-type zinc finger protein 2A) (Zinc finger CWtype coiled-coil domain protein 1), FUNCTION: Essential for epigenetic silencing by the HUSH complex. Recruited by HUSH to target site in heterochromatin, the ATPase activity and homodimerization are critical for HUSH-mediated silencing (By similarity). Represses germ cellrelated genes and L1 retrotransposons in collaboration with SETDB1 and the HUSH complex, the silencing is dependent of repressive epigenetic modifications, such as H3K9me3 mark (PubMed:29728365). Silencing events often occur within introns of transcriptionally active genes, and lead to the down-regulation of host gene expression. During DNA damage response, regulates chromatin remodeling through ATP hydrolysis (By similarity). During DNA damage response, may regulate chromatin remodeling through ATP hydrolysis (By similarity). {ECO:0000250|UniProtKB:Q9Y6X9, ECO:0000269|PubMed:29728365}. Molecular Weight: 117.3 kDa UniProt: Q69ZX6 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

### **Application Details**

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 <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