

Datasheet for ABIN3136293

CMTR2 Protein (AA 1-767) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	CMTR2
Protein Characteristics:	AA 1-767
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CMTR2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MSKRRKLPAR QPACLETFSF DVLNDVSELF AKSFSYRKPL DNEWQLPAPT ESFSCGHLEF</p> <p>RALLDLKNSL NEVKNNLSK KLDEWHRHTA FTKAGKIIS HVKKAVNAEL CTQAWCKFQE</p> <p>ILCSFPLIPQ EAFQSGRLNS LHLCEAPGAF IASLNHYLKS HRFPCESWV ANSLNPYHEA</p> <p>NDNLRMITDD RLMANTLHCW YFGPDNTGDI MTLKYLTGLQ DFLSGMSPH LVTADGSFDC</p> <p>QGNPGEQEAL VSSLHYCEAV TALITLGDGG SFVLKMFTLF EHCSVNLMYL LNCSFDQVHV</p> <p>FKPATSKAGN SEVYVCLRY KGREAVQPLL SRMVLNFGTE MTRKALFPHH VIPKSFLERH</p> <p>EECTFFHRY QLETISENIR LFESMGTEGEQ ERLNNLRDCA VQYFMQKFQL KPLSRNHWL</p> <p>KKSNIGCSMN TKWFGQRNKY FKTYNERKMM ETLWKDKVA KGYFNSWAE HTVYHPGQNS</p> <p>LLEGASSLE YQSWQVLEK KLPKVKCSF CDGEILKTLN EAIKSLGEA LSVDKAVSSK</p> <p>QQYRCCPVFS EESVLSLLR LTKCLPDEQG AEPSGPVKCL LVGSPAVCDL QMPAPLEIQL</p> <p>VESVELTAFS CSLLHDGPA YQHLFLDCLL HSLRRLHRGD VMVLPILSCF TRFMAGLTFV</p>

LHGCFRFITF SCPTSLEPLR TCAVLLCIGY QNLPDVVFQF LQNVHDLLSK LLHPSAPRQI
LQFLPMEALL QGTLLDFLWD LNAAIAKRHL HLIQGERDQ AIGSLEL

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®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: CMTR2

Alternative Name: Cmtr2 ([CMTR2 Products](#))

Background: Cap-specific mRNA (nucleoside-2'-O-)-methyltransferase 2 (EC 2.1.1.296) (Cap methyltransferase 2) (Cap2 2'-O-ribose methyltransferase 2) (MTr2) (FtsJ methyltransferase domain-containing protein 1),FUNCTION: S-adenosyl-L-methionine-dependent methyltransferase that mediates mRNA cap2 2'-O-ribose methylation to the 5'-cap structure of mRNAs. Methylates the ribose of the second nucleotide of a m(7)GpppG-capped mRNA and small nuclear RNA (snRNA) (cap0) to produce m(7)GpppRmpNm (cap2). Recognizes a guanosine cap on RNA independently of its N(7) methylation status. Display cap2 methylation on both cap0 and cap1. Displays a preference for cap1 RNAs.
{ECO:0000250|UniProtKB:Q8IYT2}.

Molecular Weight: 87.1 kDa

UniProt: [Q8BWQ4](#)

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!

Application Details

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