Datasheet for ABIN7565240

CARM1 Protein (AA 1-608) (His tag)

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Overview

Quantity:	1 mg
Target:	CARM1
Protein Characteristics:	AA 1-608
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CARM1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Carm1 Protein expressed in mammalien cells.
Sequence:	MAAAAATAVG PGAGSAGVAG PGGAGPCATV SVFPGARLLT IGDANGEIQR HAEQQALRLE VRAGPDAAGI ALYSHEDVCV FKCSVSRETE CSRVGRQSFI ITLGCNSVLI QFATPHDFCS FYNILKTCRG HTLERSVFSE RTEESSAVQY FQFYGYLSQQ QNMMQDYVRT GTYQRAILQN HTDFKDKIVL DVGCGSGILS FFAAQAGARK IYAVEASTMA QHAEVLVKSN NLTDRIVVIP GKVEEVSLPE QVDIIISEPM GYMLFNERML ESYLHAKKYL KPSGNMFPTI GDVHLAPFTD EQLYMEQFTK ANFWYQPSFH GVDLSALRGA AVDEYFRQPV VDTFDIRILM AKSVKYTVNF LEAKEGDLHR IEIPFKFHML HSGLVHGLAF WFDVAFIGSI MTVWLSTAPT EPLTHWYQVR CLFQSPLFAK AGDTLSGTCL LIANKRQSYD ISIVAQVDQT GSKSSNLLDL KNPFFRYTGT TPSPPPGSHY TSPSENMWNT GSTYNLSSGV AVAGMPTAYD LSSVIAGGSS VGHNNLIPLA NTGIVNHTHS RMGSIMSTGI VQGSSGAQGG GGSSSAHYAV NNQFTMGGPA ISMASPMSIP TNTMHYGS **Sequence without tag. The proposed Purification-Tag is based on experiences**

Product Details

	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 to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	CARM1
Alternative Name:	Carm1 (CARM1 Products)
Background:	Histone-arginine methyltransferase CARM1 (EC 2.1.1.319) (Coactivator-associated arginine methyltransferase 1) (Protein arginine N-methyltransferase 4),FUNCTION: Methylates (mono- and asymmetric dimethylation) the guanidino nitrogens of arginyl residues in several proteins involved in DNA packaging, transcription regulation, pre-mRNA splicing, and mRNA stability (PubMed:10381882, PubMed:21138967, PubMed:11341840, PubMed:11997499, PubMed:19897492, PubMed:14966289, PubMed:17218272). Recruited to promoters upon gene activation together with histone acetyltransferases from EP300/P300 and p160 families, methylates histone H3 at 'Arg-17' (H3R17me), forming mainly asymmetric dimethylarginine (H3R17me2a), leading to activates transcription via chromatin remodeling (PubMed:10381882, PubMed:11747826, PubMed:12498683, PubMed:11751582, PubMed:11341840, PubMed:11997499, PubMed:15339660, PubMed:15616592). During nuclear hormone receptor

	activation and TCF7L2/TCF4 activation, acts synergically with EP300/P300 and either one of the p160 histone acetyltransferases NCOA1/SRC1, NCOA2/GRIP1 and NCOA3/ACTR or CTNNB1/beta-catenin to activate transcription (PubMed:11997499, PubMed:16322096, PubMed:17882261, PubMed:19843527). During myogenic transcriptional activation, acts together with NCOA3/ACTR as a coactivator for MEF2C (PubMed:11713257). During monocyte inflammatory stimulation, acts together with EP300/P300 as a coactivator for NF-kappa-B (PubMed:11983685). Acts as a coactivator for PPARG, promotes adipocyte differentiation and the accumulation of brown fat tissue (PubMed:18188184). Plays a role in the regulation of pre-mRNA alternative splicing by methylation of splicing factors (PubMed:21138967). Also seems to be involved in p53/TP53 transcriptional activation (PubMed:15186775). Methylates EP300/P300, both at 'Arg-2142', which may loosen its interaction with NCOA2/GRIP1, and at 'Arg-580' and 'Arg-604' in the KIX domain, which impairs its interaction with CREB and inhibits CREB-dependent transcriptional activation (PubMed:11701890). Also methylates arginine residues in RNA-binding proteins PABPC1, ELAVL1 and ELAV4, which may affect their mRNA-stabilizing properties and the half-life of their target mRNAs (PubMed:11850402, PubMed:12756295, PubMed:12237300). Acts as a transcriptional coactivator of ACACA/acetyl-CoA carboxylase by enriching H3R17 methylation at its promoter, thereby positively regulating fatty acid synthesis (PubMed:30366907). Independently of its methyltransferase activity, involved in replication fork progression: promotes PARP1 recruitment to replication forks, leading to poly-ADP-ribosylation of chromatin at replication forks and reduced fork speed (By similarity). {ECO:0000250|UniProtKB:Q86X55, ECO:0000269|PubMed:10381882, ECO:0000269|PubMed:11341840, ECO:0000269|PubMed:11701890, ECO:0000269|PubMed:11713257, ECO:0000269|PubMed:11747826, ECO:0000269|PubMed:11751582, ECO:0000269|PubMed:11850402, ECO:0000269|PubMed:11983685, ECO:0000269|PubMed:11997499, ECO:0000269|PubMed:12237300, ECO:0000269|PubMed:12498683, ECO:0000269|PubMed:12756295, ECO:0000269|PubMed:14966289, ECO:0000269|PubMed:15186775, ECO:0000269|PubMed:15339660, ECO:0000269|PubMed:15616592, ECO:0000269|PubMed:16322096, ECO:0000269|PubMed:17218272, ECO:0000269|PubMed:17882261, ECO:0000269|PubMed:18188184, ECO:0000269|PubMed:19843527, ECO:0000269|PubMed:19897492, ECO:0000269|PubMed:21138967, ECO:0000269|PubMed:30366907}.
Molecular Weight:	65.9 kDa
UniProt:	Q9WVG6

Target Details

Pathways:	Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Lipid Metabolism by PPARalpha, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Positive Regulation of fat Cell Differentiation

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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

