

Datasheet for ABIN3135188

EHMT1 Protein (AA 1-1296) (Strep Tag)



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Overview

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| Quantity: | 250 µg |
| Target: | EHMT1 |
| Protein Characteristics: | AA 1-1296 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This EHMT1 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

Product Details

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| Brand: | AliCE® |
| Sequence: | <p>MAAADAEQAV LAKQETKQDC CMKTELLRED TPMAADEGST EKQEGETPMA ADGETNGSCE</p> <p>KSGDPSHLNA PKHTQENTRA SPQEGTNRVS RVAENGVSER DTEVGKQNHV TADDFMQTSV</p> <p>IGSNGYFLNK PALQGQPLRT PNILTSSLPG HAAKTLPGGA SKCRTLSALP QTPTTAPTVP</p> <p>GEGSADTEDR KPTASGTDVR VHRARKTMPK SILGLHAASK DHREVQDHKE PKEDINRNIS</p> <p>ECGRQQLLPT FPALHQSLPQ NQCYMATTKS QTACLPFVLA AAVSRKKKRR MGTYSLVPPK</p> <p>KTKVLKQRTV IEMFKSITHS TVGAKGEKAL DDSALHVNGE SLEMDSEDED SDELEDDH</p> <p>GAEQAAAFPT EDSRTSKESM SETDRAAKMD GDSEEEQESP DTGEDEDGGD ESDLSSSESI</p> <p>KKKFLKRRGK TDSPWIKPAR KRRRRSRKKP SSMLGSEACK SSPGSMEQAA LGDSAGYMEV</p> <p>SLDSLRLVR GILSSQTENE GLASGPDVLG TDGLQEVPLC SCRMPKSR EISTLANNQC</p> <p>MATESVDHEL GRCTNSVVKY ELMRPSNKAP LLVLCEDHRG RMVKHQCCPG CGYFCTAGNF</p> <p>MECQPESSIS HRFHKDCASR VNNASYCPHC GEEASKAKEV TIAKADTTST VTLAPGQEKs</p> |

LAAEGRADTT TGSAGAPED ERSQSTAPQA PECFDPAGPA GLVRPTSGLS QGPGKETLES
ALIALDSEKP KKLRFHPKQL YFSARQGELQ KVLLMLVDGI DPNFKMEHQS KRSPLHAAAE
AGHVDICHML VQAGANIDTC SEDQRTPLME AAENNHLDV KYLIKAGA QV DPKDAEGSTC
LHLAAKKGHY DVVQYLLSNG QMDVNCQDDG GWTPMIWATE YKHVELVKLL LSKGSDINIR
DNEENICLHW AAFSGCVDIA EILLAACKDL HAVNIHGDSP LHIAARENRY DCVVLFLSRD
SDVTLKNKEG ETPLQCASLS SQVWSALQMS KALRDSAPDK PVAVEKTVSR DIARGYERIP
IPCVAVDSE LCPTNYKYVS QNCVTSPMNI DRNITHLQYC VCVDCCSSST CMCGQLSMRC
WYDKDGRLLP EFNMAEPPLI FECNHACSCW RNCNRNVVQN GLRARLQLYR TQDMGWGVRS
LQDIPLGTFV CEYVGELISD SEADVREEDS YLFDLDNKDG EYVICIDARFY GNVSRFINHH
CEPNLVPVRV FMSHQDLRFP RIAFFSTRLI QAGEQLGFDY GERFWDVKGK LFSCRCGSSK
CRHSSAALAQ RQASAAQEPQ ENGLPDTSSA AAADPL

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 -

Product Details

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.

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| Purification: | One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®). |
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| Purity: | > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). |
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| Grade: | custom-made |
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Target Details

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| Target: | EHMT1 |
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| Alternative Name: | Ehmt1 (EHMT1 Products) |
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| Background: | <p>Histone-lysine N-methyltransferase EHMT1 (EC 2.1.1.-) (EC 2.1.1.367) (Euchromatic histone-lysine N-methyltransferase 1) (Eu-HMTase1) (G9a-like protein 1) (GLP) (GLP1) (Lysine N-methyltransferase 1D),FUNCTION: Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in G0/G1 transition in cell cycle. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Represses the expression of mitochondrial function-related genes, perhaps by occupying their promoter regions, working in concert with probable chromatin reader Baz2b (PubMed:32103178). {ECO:0000269 PubMed:15774718, ECO:0000269 PubMed:18818694, ECO:0000269 PubMed:32103178}.</p> |
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| Molecular Weight: | 142.0 kDa |
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| UniProt: | Q5DW34 |
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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!

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