

Product datasheet for **RC207629**

FAM119A (METTL21A) (NM_145280) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FAM119A (METTL21A) (NM_145280) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FAM119A
Synonyms:	FAM119A; HCA557b; HSPA-KMT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207629 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGCCCTCGTGCCTATGAGGAGACCACGGAATTTGGGTTGCAGAAATCCACAAGCCTCTTGCAACTT
TTTCCTTTGCAAACACACGATCCAGATCCGGCAGGACTGGAGACACCTGGGAGTCGCAGCGGTGGTTTG
GGATGCGGCCATCGTTCTTTCCACATACCTGGAGATGGGAGCTGTGGAGCTCAGGGGCCGCTCTGCCGTG
GAGCTGGGTGCTGGCACGGGCTGGTGGGCATAGTGGCTGCCCTGCTGGGTGCTCATGTGACTATCACGG
ATCGAAAAGTAGCATTAGAATTTCTAAATCAAACGTTCAAGCCAACTTACCTCCTCATATCCAAACTAA
AACTGTTGTTAAGGAGCTGACTTGGGGACAAAATTTGGGGAGTTTTTCTCCTGGAGAATTTGACCTGATA
CTTGGTGCTGATCATATATTTAGAAGAAACATTCACAGATCTTCTTCAAACACTGGAACATCTCTGTA
GCAATCACTCTGTGATTCTTTAGCATGCCGAATTCGCTATGAACGGGATAACAACCTTCTTAGCAATGCT
GGAGAGGCAATTTATTGTGAGAAAGGTTCACTACGATCCTGAAAAAGATGTACATATTTACGAAGCACAG
AAGAGAAACCAGAAGGAGGACTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207629 protein sequence
Red=Cloning site Green=Tags(s)

MALVPYEETTEFGLQKFHKPLATFSFANHTIQIRQDWRHLGVAAVVWDAIIVLSTYLEMGAVELRGRSAV
 ELGAGTGLVGIVAALLGAHVITIDRKVALEFLKSNVQANLPPHIQTKTVVKELTWGQNLGSPGDFDLI
 LGADIIYLEETFTDLLQTLLEHLCNSHVSILLACRIRYERDNNFLAMLERQFIVRKVHYDPEKDVHIYEAQ
 KRNQKEDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6334_a10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145280

ORF Size: 654 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_145280.3](#), [NP_660323.2](#)

RefSeq Size: 4748 bp

RefSeq ORF: 657 bp

Locus ID: 151194

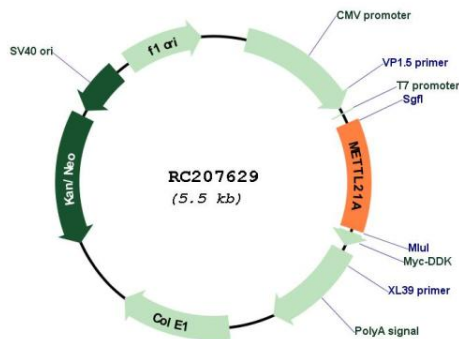
UniProt ID: [Q8WXB1](#)

Cytogenetics: 2q33.3

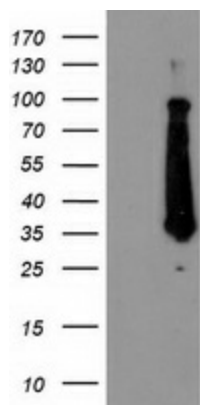
MW: 24.6 kDa

Gene Summary: Protein-lysine methyltransferase that selectively trimethylates residues in heat shock protein 70 (HSP70) family members. Contributes to the in vivo trimethylation of Lys residues in HSPA1 and HSPA8. In vitro methylates 'Lys-561' in HSPA1, 'Lys-564' in HSPA2, 'Lys-585' in HSPA5, 'Lys-563' in HSPA6 and 'Lys-561' in HSPA8.[UniProtKB/Swiss-Prot Function]

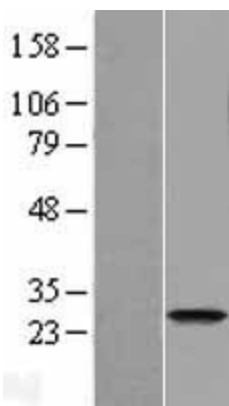
Product images:



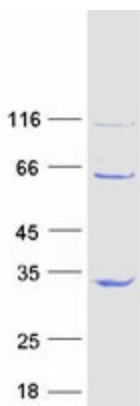
Circular map for RC207629



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FAM119A (Cat# RC207629, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FAM119A (Cat# [TA503704]). Positive lysates [LY408004] (100ug) and [LC408004] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY426777]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225260] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified METTL21A protein (Cat# [TP307629]). The protein was produced from HEK293T cells transfected with METTL21A cDNA clone (Cat# RC207629) using MegaTran 2.0 (Cat# [TT210002]).