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Product datasheet for RC221362

KIAA0859 (METTL13) (NM_015935) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIAA0859 (METTL13) (NM_015935) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EEF1AKNMT
Synonyms:	5630401D24Rik; CGI-01; DFNB26; DFNB26M; DFNM1; feat; KIAA0859; METTL13
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RC221362 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACCTCTTACCTAAAAGTTCCAGGGAGTTTGGCTCCGTTGACTATTGGGAGAAGTTCTTCCAGCAGC
GAGGAAAGAAAGCTTTCGAGTGGTATGGAACCTACCTGGAACTGTGCGGGGTGCTACATAAATATATCAA
GCCCAGGGAAAAGGTGCTGGTGATTGGGTGTGGCAACTCAGAACTGAGTGAGCAACTGTATGATGTGGGC
TATCGGGATATAGTGAACATCGACATCAGTGAGGTTGTCATCAAGCAAATGAAGGAATGTAATGCCACCC
GACGGCCCCAGATGAGCTTCTTGAAGATGGACATGACGCAGATGGAGTTTCCTGATGCCTCGTTCCAGGT
GGTGTTGGACAAGGGCACCCTGGATGCTGTCCTGACAGATGAGGAAGAGAAGACCTTACAACAGGTGGAC
AGGATGCTGGCTGAGGTTGGCCGTGTCCTGCAGGTGGGCGGTCGCTATCTCTGCATCTCCCTGGCTCAGG
CTCACATCCTGAAGAAAGCAGTGGGCCACTTCTCCCGGGAGGGGTGGATGGTGAGGGTGCACCAAGTGGC
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GAAGCCTGGGAGGGGTTGGGATGACACGTATGTCTTGTCAGATATGCTCAAGACGGTGAAAATTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221362 protein sequence
Red=Cloning site Green=Tags(s)

MNLLPKSSREFGSVDYWEKFFQQRGKKAFEWYGTYLELCGVLHKYIKPREKVLVIGCGNSELSEQLYDVG
YRDIVNIDISEVVIKQMKECNATRRPQMSFLKMDMTQMEFPDASFQVVLDKGTLDAVLTDEEEKTLQQVD
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KFRPVPGSALQIFELCAQEQRKPVRLESAERLAEAVQERQQYAWLCSQLRRKARLGSVSLDLCDGDTGEP
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QAELSARVMELAPAGMPTQQQVPFLSVGGDIGVRTVQHQDCSPLSGDYVIEDVQGDDKRYFRRLIFLSNR
NVVQSEARLLKDVSHKAQKKRKKDRKKQRPADAEDLPAAPGQSIDKSYLCCEHHKAMIAGLALLRNPELL
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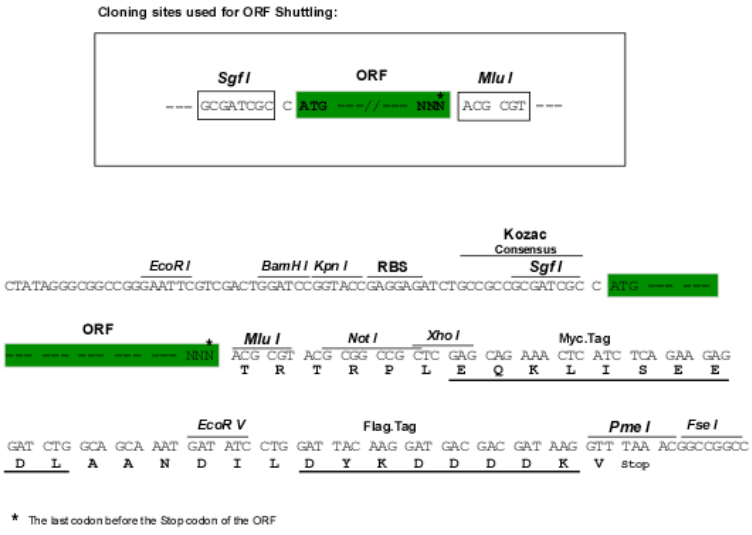
GGGEARPCYDVIMFDVDSKDPTLGMSCPPPAFVEQSFLQKVKSILTPEGVFILNLVCRDLGLKDSVLAGL
KAVFPLLYVRRIEGEVNEILFCQLHPEQKLATPELLETAQALERTLRKPGRGWDDTYVLSDMLKTVKIV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

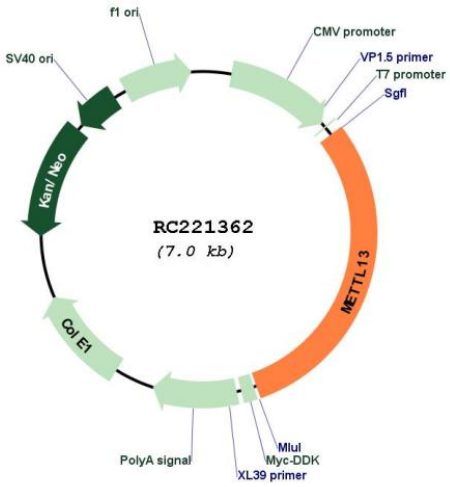
Chromatograms: https://cdn.origene.com/chromatograms/mk6325_e06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



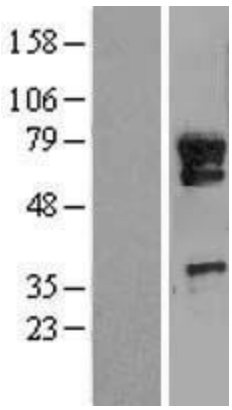
Plasmid Map:



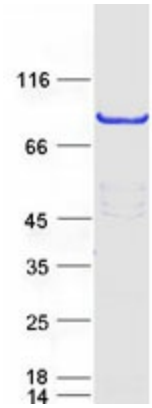
ACCN:	NM_015935
ORF Size:	2097 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_015935.5
RefSeq Size:	3421 bp
RefSeq ORF:	2100 bp

Locus ID:	51603
UniProt ID:	Q8N6R0
Cytogenetics:	1q24.3
Protein Families:	Druggable Genome
MW:	78.8 kDa
Gene Summary:	Dual methyltransferase that catalyzes methylation of elongation factor 1-alpha (EEF1A1 and EEF1A2) at two different positions, and is therefore involved in the regulation of mRNA translation (PubMed:30612740, PubMed:30143613). Via its C-terminus, methylates EEF1A1 and EEF1A2 at the N-terminal residue 'Gly-2' (PubMed:30143613). Via its N-terminus dimethylates EEF1A1 and EEF1A2 at residue 'Lys-55' (PubMed:30612740, PubMed:30143613). Has no activity towards core histones H2A, H2B, H3 and H4 (PubMed:30612740). [UniProtKB/Swiss-Prot Function]

Product images:



Western blot validation of overexpression lysate (Cat# [LY414291]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221362 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EEF1AKNMT protein (Cat# [TP321362]). The protein was produced from HEK293T cells transfected with EEF1AKNMT cDNA clone (Cat# RC221362) using MegaTran 2.0 (Cat# [TT210002]).