

Product datasheet for **RC209697**

EEF1A1 (NM_001402) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	EEF1A1
Synonyms:	CCS-3; CCS3; EE1A1; EEF-1; EEF1A; eEF1A-1; EF-Tu; EF1A; GRAF-1EF; LENG7; PTI1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC209697 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGAAAGGAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGCAAGTCCACCACTA
 CTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGC
 TGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGATAAACTGAAAGCTGAGCGTGAACGTGGT
 ATCACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAG
 GACACAGAGACTTTATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCTGATTGTTGC
 TGCTGGTGTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCT
 TACACACTGGGTGTGAACAACATAATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCC
 AGAAGAGATATGAGGAAATTTGTAAGGAAGTCAGCACTTACATTAAGAAAATTTGGCTACAACCCGACAC
 AGTAGCATTTGTCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACATGCCTTGG
 TTCAAGGGATGGAAGTCACCCGTAAGGATGGCAATGCCAGTGAACACGCTGCTTGAGGCTCTGGACT
 GCATCCTACCACCAACTCGTCCAAGTACAAGCCCTTGCCTGCTCTCCAGGATGTCTACAAAATTGG
 TGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCCGGTATGGTGGTCACCTTT
 GCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTC
 CTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTCTGTCGTGGCAACGTTGCTGG
 TGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCTGAACCATCCA
 GGCCAAATAAGCGCCGGCTATGCCCTGTATTGGATTGCCACACGGCTCATTGTCATGCAAGTTTGCTG
 AGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTTCTGAAGTCTGG
 TGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCT
 TTGGGTCGCTTTGCTGTTCTGTATATGAGACAGACAGTTGCGGTGGGTGTATCAAAGCAGTGGACAAGA
 AGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCAGAAAGCTCAGAAGGCTAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209697 protein sequence
 Red=Cloning site Green=Tags(s)

MGKEKTHINIVVIGHVDSGKSTTTGHLIYKCGIDKRTIEKFEKEAAEMGKGSFKYAWVLDKLKAERERG
 ITIDISLWKFETSKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVAAGVGEFEAGISKNGQTREHALLA
 YTLGVKQLIVGVNKMDSTEPPYSQKRYEEIVKEVSTYIKKIGYNPDVAFVPISGWNGDNMLEPSANMPW
 FKGWKVTRKDGNASGTTLLEALDCILPPTRPDKPLRLPLQDVYKIGGIGTVPVGRVETGVLKPGMVVTF
 APVNVTTTEVKSVEMHHEALSEALPGDNVGFNVKNVSVKDVRRGNVAGDSKNDPPMEAAGFTAQVIILNHP
 GQISAGYAPVLDCHTAHIACKFAELKEKIDRRSGKKLEDGPKFLKSGDAAIVDMVPGKPMCVESFSDYPP
 LGRFAVRDMRQTVAVGVIAVDKKAAGAGKVTKSAQKAQKAK

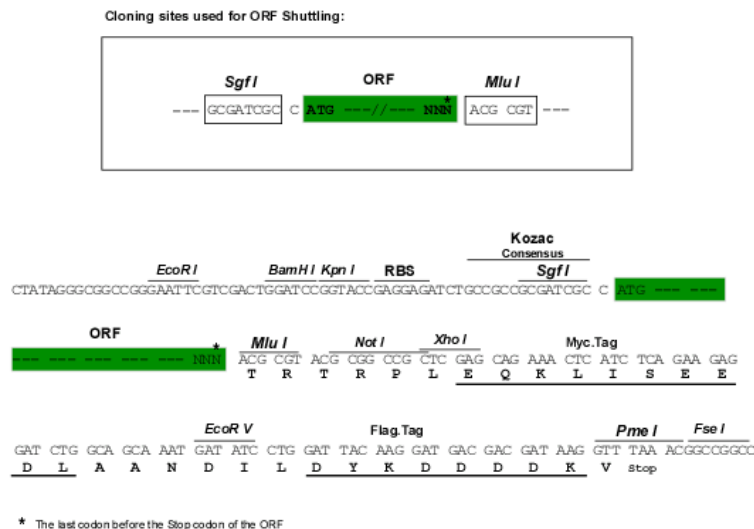
TRTRPLE**QKLISEEDLAANDILDYKDDDDKV**

Chromatograms:

https://cdn.origene.com/chromatograms/mk6269_b07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001402

ORF Size: 1386 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001402.6](#)

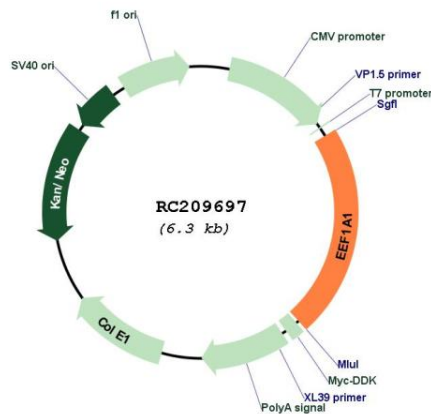
RefSeq Size: 3528 bp

RefSeq ORF: 1389 bp

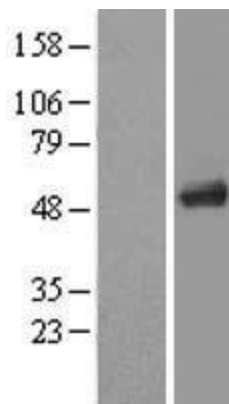
Locus ID: 1915

UniProt ID:	P68104
Cytogenetics:	6q13
Domains:	GTP_EFTU, GTP_EFTU_D3, GTP_EFTU_D2
Protein Families:	Druggable Genome
MW:	50.1 kDa
Gene Summary:	This gene encodes an isoform of the alpha subunit of the elongation factor-1 complex, which is responsible for the enzymatic delivery of aminoacyl tRNAs to the ribosome. This isoform (alpha 1) is expressed in brain, placenta, lung, liver, kidney, and pancreas, and the other isoform (alpha 2) is expressed in brain, heart and skeletal muscle. This isoform is identified as an autoantigen in 66% of patients with Felty syndrome. This gene has been found to have multiple copies on many chromosomes, some of which, if not all, represent different pseudogenes. [provided by RefSeq, Jul 2008]

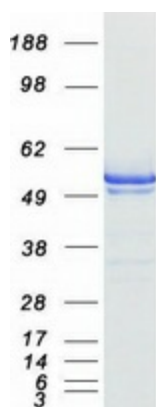
Product images:



Circular map for RC209697



Western blot validation of overexpression lysate (Cat# [LY419954]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209697 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EEF1A1 protein (Cat# [TP309697]). The protein was produced from HEK293T cells transfected with EEF1A1 cDNA clone (Cat# RC209697) using MegaTran 2.0 (Cat# [TT210002]).