

Product datasheet for **RC220621**

EEFSEC (NM_021937) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EEFSEC (NM_021937) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EEFSEC
Synonyms:	EFSEC; SELB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC220621 representing NM_021937
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGGGCGGGGTGAACGTGAACGTGGCGTCTGGCCACATCGACAGCGCAAGACGGCGCTGG
 CGCGGGCGCTAAGCACCACAGCCTCCACCGCCGCTTTGACAAGCAGCCGAGAGCCGAGCGCGGCAT
 CACGCTCGATCTGGGCTTCTCGTCTTCTCGTGCCGCTGCCCGCGCCCTGCGGTCTTCTGCCGAG
 TTCCAGGCAGCGCCGAGGCCGAGCCGAGCCGCGGAGCCACTGCTTACGGTACGCTGGTCTGACTGCC
 CCGGGCACGCCTCCCTCATCCGGACCATCATCGGCGGGGCCAGATCATTGATCTGATGCTGGTTCAT
 CGATGTGACCAAGGGGATGCAGACCCAGTCAGCGGAATGCCTTGTGATCGGCCAGATTGCCTGCCAGAAG
 CTGGTCTGGTGTGAACAAAATAGACCTTTACCTGAAGGAAAGAGACAGGCAGCAATTGATAAAATGA
 CCAAGAAAATGCAGAAGACCCTAGAGAACCAAGTTCGAGGTGCACCGATTATACCCGTGGCGGCCAA
 GCCGGGGGACCAGAGGCCCCGAAACTGAAGCTCCACAGGGCATTCCAGAGCTCATTGAGCTCCTGACG
 TCCAGATTTCCATCCCAACGAGAGACCCTCGGACCGTTCTCATGTCTGTGGACCACTGTTCTCCA
 TCAAAGGCCAAGGCACTGTGATGACAGGGACCATCCTTTCAGGCTCCATCAGCCTCGGTGACAGTGTGGA
 GATCCCTGCCCTCAAGTGGTGAAGAAGGTGAAGTCCATGCAGATGTTCCACATGCCCATCACTTCAGCC
 ATGCAAGGAGACCGGCTGGGCATCTGCGTCACCCAGTTTGACCCTAAGCTGCTGGAGCGCGGGTGGTGT
 GTGCCCGGAGTCCCTGCACACTGTCCATGCGGCCCTCATCTCTGTGGAAAAGATACCGTATTTCCGGGG
 GCCCTGCAAACCAAGGCCAAGTTCCACATTACAGTGGCCATGAAACAGTCATGGGCGGGTGTGTTT
 TTCAGTCTGCTCCAGATAACTTTGACCAGGACCTATACTGGACTTTTCAACTTCTCAAGAATACC
 TTTTCCAGGAGCAGTACCTGTCCAAGGATTTGACACCAGCAGTGACAGACAATGATGAGGCCGACAAGAA
 GGCCGGCCAGGCCACAGAGGGCCATTGTCTCGGCAGCAGTGGGCCCTGGTGGAGTTTGAGAAGCCCGTC
 ACCTGCCCTCGGCTGTGCTGGTATTGGCTCCAGGCTAGATGCGGACATTACACCAACACGTGCCGGC
 TAGCCTTCCATGGCATCCTGCTCCACGGCTAGAGGACAGGAACTACGCCGACAGCTTCTGCCAGGCT
 GAAGGTGTACAAGCTGAAGCACAAGCATGGCCTTGTGGAGCGGGCGATGGATGACTACAGTGTGATCGGC
 CGCTCCCTGTTCAAAAAGGAAACCAACATCCAGCTTCTCGTGGGGCTCAAGGTGCACTTGTCCACTGGG
 AACTGGGCATCATCGACAGTGCCTTCGGCCAGAGCGGCAAGTTCAAGATCCACATCCAGGTGCCCTCAG
 CCCCAGTCCAAGAAGATCCTGACACCCGCCCTCAAGAAGCGGGCCGGGCTGGCCGTGGGAGGCCACC
 AGGCAGGAGGAGCGCCGAGCGGAGCGGCCCTCACAGCATGTGGTGTCTCAGCCTGACTTCAAGCGTT
 ATGTCTTCGACACCCACAAGCGCATGGTTCAGTCTCC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220621 representing NM_021937
 Red=Cloning site Green=Tags(s)

MAGRRVNVVGLGHIDSGKTALARALSTTASTAAFDKQPQSRERGITLDLGFSCFSVPLPARLRSSLPE
 FQAAPAEPEPEPGEPLLQVTLVDCPGHASLIRTIIGGAQIIDLMMLVIDVTKGMQTQSAECLVIGQIACQK
 LVVVLNKIDLLPEGKRQAAIDKMTKKMQKLENTKFRGAPIIPVAAKPGGPEAPEAPEAQGIPELIELLT
 SQISIPTRDPSGPFMSVDHCFSIKGGQTVMTGTILSGSISLGDVEIPALKVVKKVKSQMFMHPITSA
 MQGDRLGICVTQFDPKLLERGLVCAPESLHTVHAALISVEKIPYFRGPLQTKAKFHITVGHETVMGRLMF
 FSPAPDNFDQEPILDSFNFSQEYLFQEYLSKDLTPAVTDNDEADKKAGQATEGHCPRQQWALVEFEKPV
 TCPRLCLVIGSRDLADIHTNTRCLAFHGILLHGLEDRNYADSFLPRLKVYKLLKHKHGLVERAMDDYSVIG
 RSLFKKETNIQLFVGLKVHLSTGELGIIDSAFGQSGKFKIHIPGGLSPESKKILTPALKKRARAGRGEAT
 RQEESAERSEPSQHVVLSTFKRYVFDTHKRMVQSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8042_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021937

ORF Size: 1788 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_021937.3](#), [NP_068756.2](#)

RefSeq Size: 2239 bp

RefSeq ORF: 1791 bp

Locus ID: 60678

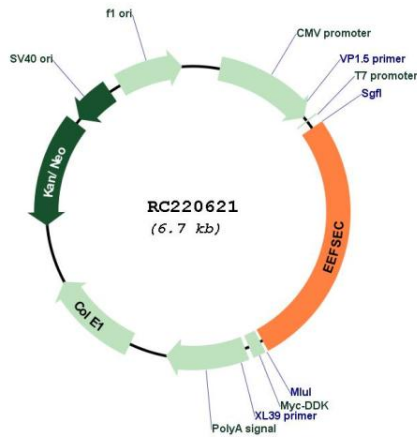
UniProt ID: [P57772](#)

Cytogenetics: 3q21.3

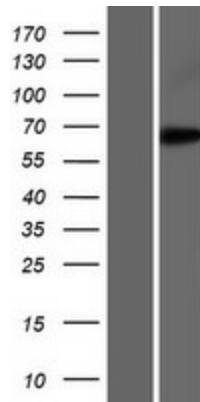
MW: 65.1 kDa

Gene Summary: Translation factor necessary for the incorporation of selenocysteine into proteins. It probably replaces EF-Tu for the insertion of selenocysteine directed by the UGA codon. SelB binds GTP and GDP.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC220621



Western blot validation of overexpression lysate (Cat# [LY411869]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220621 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).