

Product datasheet for **RC219106**

USF1 (NM_207005) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USF1 (NM_207005) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USF1
Synonyms:	bHLHb11; FCHL; FCHL1; HYPLIP1; MLTF; MLTFI; UEF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219106 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGGGCAGCAGAAAACAGCTGAAACGGAAGAGGGGACAGTGCAGATTCAGGAAGGTGCAGTGGCTA
CTGGGGAAGACCCAACCAGTGTGGCTATTGCCAGCATCCAGTCAGCTGCCACCTTCCTGACCCCAACGT
CAAGTACGTCTTCCGAAGTGAAGTGGGGCCAGGTGATGTACAGGGTATCCAGGTGTCTGAGGGCAG
CTGGATGGCCAACTGAGGGAAGTGGCGCCATCAGTGGCTACCCTGCCACTCAATCCATGACCCAGGCGG
TGATCCAGGGTGTCTTACCAGTGTATGCAGTTGACACGGAGGGGACAGCTGCTGAGACGCACTATAC
TTACTTCCCAGCACGGCAGTGGGAGATGGGGCAGGGGTACCACATCGGGGAGTACAGCTGCTGTGT
ACTACCCAGGGCTCAGAGGCACTGCTGGGGCAGGCGACCCCTCCTGGCACTGGTCAATCTTTGTGATGA
TGTCAACCAAGAAGTACTGCAGGGAGGAAGCCAGCGCTCAATTGCCCTAGGACTCACCTTATCCCC
GAAGTCAGAAGCTCCCCGGACGACTCGGGATGAGAAACGAGGGCTCAGCATAATGAAGTGGAGCGTCG
CGCCGAGACAAGATCAACAAGTGGATCGTGCAGCTCTCCAAGATAATCCCAGACTGCTCTATGGAGAGCA
CCAAGTCTGGCCAGAGTAAAGTGGGATTCTATCCAAGCTTGTGATTATCCAGGAGCTTCGGCAGAG
TAACCACCGCTTGTCTGAAGAAGTGCAGGACTTGACCAACTGCAGCTGGACAATGACGTGCTTCGACAA
CAGGTGGAAGATCTTAAAAACAAGAATCTGCTGCTTCGAGCTCAGTTGCCGCACCACGGATTAGAGGTG
TCATCAAGAATGACAGCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219106 protein sequence
Red=Cloning site Green=Tags(s)

MKGQQKTAETEEGTVQIQEGAVATGEDPTSVAIASIQSAATFPDPNVKYVFRTEGGQVMYRVIQVSEGO
 LDGQTEGTGAISGYPATQSMQAVIQGAFSTDDAVDTEGTAETHYTFPSTAVGDGAGGTTSGSTA
 AVVTTQGEALLGQATPPGTGQFFVMMSPQEVVLQGGSQRSIAPRTHPYSPKSEAPRTRDEKRRAQHN
 EVERRRDKINNWIVQLSKIIPDCSMESTKSGQSKGILSKACDYIQELRQSNHRLSEELQGLDQLQLDNDVLRQ
 QVEDLKNKNLLLRAQLRHHGLEVVIKNDSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6427_d12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_207005

ORF Size: 933 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 Size: 1799 bp

RefSeq ORF: 756 bp

Locus ID: 7391

UniProt ID: [P22415](#)

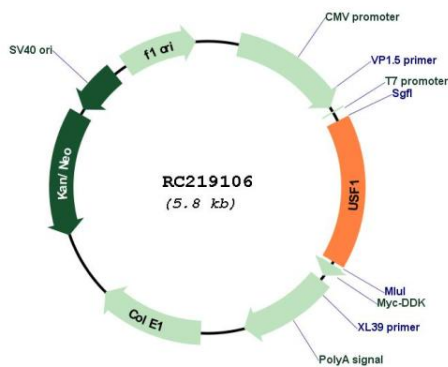
Cytogenetics: 1q23.3

Protein Families: Druggable Genome, Transcription Factors

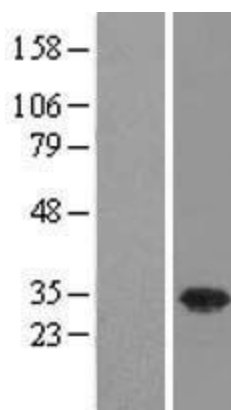
MW: 33.5 kDa

Gene Summary: This gene encodes a member of the basic helix-loop-helix leucine zipper family, and can function as a cellular transcription factor. The encoded protein can activate transcription through pyrimidine-rich initiator (Inr) elements and E-box motifs. This gene has been linked to familial combined hyperlipidemia (FCHL). Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been defined on chromosome 21. [provided by RefSeq, Feb 2013]

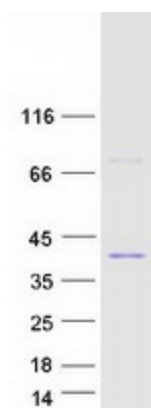
Product images:



Circular map for RC219106



Western blot validation of overexpression lysate (Cat# [LY404129]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219106 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified USF1 protein (Cat# [TP319106]). The protein was produced from HEK293T cells transfected with USF1 cDNA clone (Cat# RC219106) using MegaTran 2.0 (Cat# [TT210002]).