

Product datasheet for RC208921

ELK1 (NM_005229) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: ELK1 (NM_005229) Human Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: ELK1
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RC208921 representing NM_005229
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACCCATCTGTGACGCTGTGGCAGTTTCTGCTGCAGCTGCTGAGAGAGCAAGGCAATGGCCACATCA
 TCTCCTGGACTTCACGGGATGGTGGTGAATTCAGCTGGTGGATGCAGAGGAGGTGGCCCGGCTGTGGGG
 GCTACGCAAGAACAAGACCAACATGAATTACGACAAGCTCAGCCGGGCTTGGGTACTACTATGACAAG
 AACATCATCCGCAAGGTGAGCGGCCAGAAGTTCGCTACAAGTTTGTGTCCTACCCTGAGGTCGCAGGGT
 GCTCCACTGAGGACTGCCGCCAGCCAGAGGTGTCTGTTACCTCCACCATGCCAAATGTGGCCCTGC
 TGTATACATGCCGCCAGGGGACACTGTCTCTGAAAAGCCAGGCACACCCAAGGGTGCAGGAATGGCA
 GGCCAGGCGGTTTGGCACGCAGCAGCCGGAACGAGTACATGCGCTCGGGCTCTATTCCACCTTACCA
 TCCAGTCTCTGCAGCCGAGCCACCCCTCATCCTCGGCCTGCTGTGGTCTCCCAAGTGCAGCTCCTGC
 AGGGGCAGCAGCGCCCCCTCGGGGAGCAGGAGCACCAGTCCAAGCCCCTTGGAGGCTGTCTGGAGGCT
 GAAGAGGCGGCTTGCCTCTGCAGGTATCCTGACCCCGCCGAGGCCCAACCTGAAATCGGAAGAGC
 TTAATGTGGAGCCGGTTTGGCCGGGCTTGGCCCGAAGTAAAAGTAGAAGGGCCCAAGGAAGAGTT
 GGAAGTTGCGGGGAGAGAGGGTTTGCCAGAAAACCAAGGCCGAGCCAGAAGTCCCTCCACAGGAG
 GGCGTGCCAGCCGGCTGCCCGGTTGTTATGGACACCCGAGGGCAGGGGGCGGCATGCGGCTTCCA
 GCCTGAGATCTCCAGCCGAGAAAGGGCCGGAAGCCCGGGACCTAGAGCTTCCACTCAGCCCGAGCCT
 GCTAGGTGGGCCGGGACCCGAACGGACCCAGGATCGGGAAGTGCTCCGGCCTCCAGGCTCCGGGGCCG
 GCGCTGACCCCATCCCTGCTTCTACGCATACATTGACCCCGGTGCTGCTGACACCCAGCTCGTGCCTC
 CTAGCATTCACTTCTGGAGCACCTGAGTCCCATTGCGCCCCGTAGCCCGGCCAAGCTCTCCTTCCAGTT
 TCCATCCAGTGGCAGCGCCAGGTGCACATCCCTTCTATCAGCGTGGATGGCTCTCGACCCCGTGGTG
 CTCTCCCCAGGGCCCAAGCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC208921 representing NM_005229
Red=Cloning site Green=Tags(s)

MDPSVTLWQFLQLLREQNGHIIISWTSRDGGEFKLVDAEEVARLWGLRKNKTNMNYDKLSRALRYYYDK
 NIIRKVSQKQFVYKFSYPEVAGCSTEDCPPQPEVSVTSTMPNVAPAAIHAAPGDTVSGKPGTPKGAGMA
 GPGGLARSSRNEYMRGLYSTFTIQSLQPQPPHPRPAVVLPSAAPAGAAAPSGSRSTSPSPLEACLEA
 EEAGLPLQVILTPPEAPNLKSEELNVEPGLGRALPPEVKVEGPKKEELEVAGERGFVPETTKAEPEVPPQE
 GVPARLPAVVMDTAGQAGGHAASSPEISQPQKGRKPRDLELPLSPSLLGGPGPERTPGSGSGSLQAPGP
 ALTPSLLPHTLTPVLLTPSSLPPSIHFSTLSPIAPRSPAKLSFQFPSSGSAQVHIPSISVDGLSTPVV
 LSPGPQKP

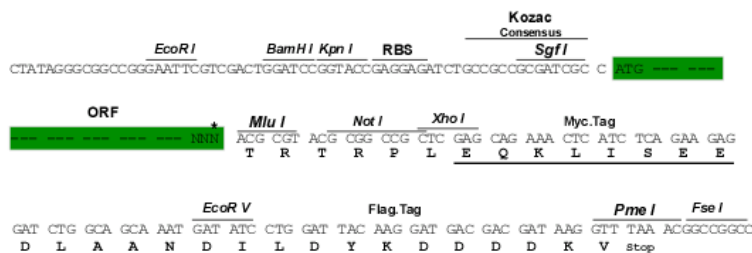
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1737_e04.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_005229

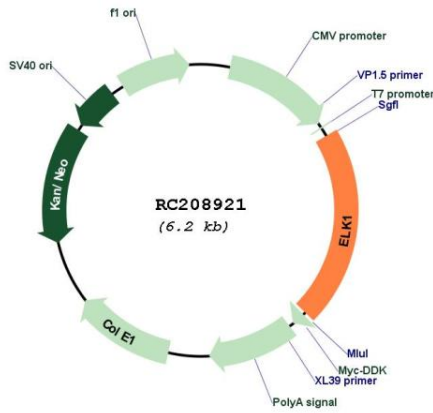
ORF Size: 1284 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

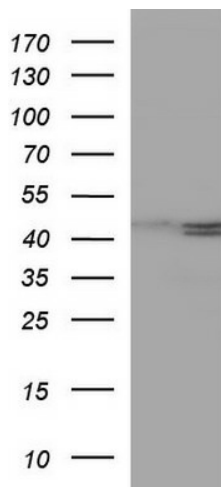
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_005229.4 , NP_005220.2
RefSeq Size:	2828 bp
RefSeq ORF:	1287 bp
Locus ID:	2002
UniProt ID:	P19419
Cytogenetics:	Xp11.23
Domains:	ETS
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Endometrial cancer, ErbB signaling pathway, Focal adhesion, GnRH signaling pathway, Insulin signaling pathway, MAPK signaling pathway, Prion diseases
MW:	44.9 kDa
Gene Summary:	This gene is a member of the Ets family of transcription factors and of the ternary complex factor (TCF) subfamily. Proteins of the TCF subfamily form a ternary complex by binding to the the serum response factor and the serum response element in the promoter of the c-fos proto-oncogene. The protein encoded by this gene is a nuclear target for the ras-raf-MAPK signaling cascade. This gene produces multiple isoforms by using alternative translational start codons and by alternative splicing. Related pseudogenes have been identified on chromosomes 7 and 14. [provided by RefSeq, Mar 2012]

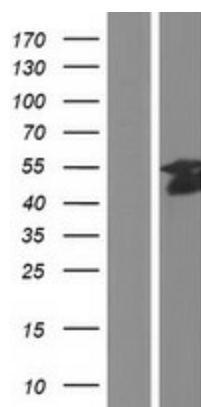
Product images:



Circular map for RC208921



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ELK1 (Cat# RC208921, 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-ELK1 (Cat# [TA590610]). Positive lysates [LY417435] (100ug) and [LC417435] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417435]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208921 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).