

Product datasheet for **RC200631**

ESE1 (ELF3) (NM_004433) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	ESE1
Synonyms:	EPR-1; ERT; ESE-1; ESX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200631 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTGCAACCTGTGAGATTAGCAACATTTTATAGCAACTACTTCAGTGCATGTACAGCTCGGAGGACT
 CCACCTTGGCCTCTGTTCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTACTGACCTGAGCAACCC
 CCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACG
 CAGGTTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCAC
 GATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGCCTCT
 GGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT
 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCC
 CCTTTGCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCGGCAGCTGTGGCGCAGG
 AGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCA
 GACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCAGCGATGGTTTTCTGTG
 ACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGAAACGAGGCCGCCCGAAAGCTGAGCAAAGAGTA
 CTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCAGAGGCACCCACCTGTGGGAGTTTATCCGG
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 GAAGCTGAGCCGGGCATGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTC
 GTCTACAAGTTTGGCAAAAACCTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC200631 protein sequence
 Red=Cloning site Green=Tags(s)

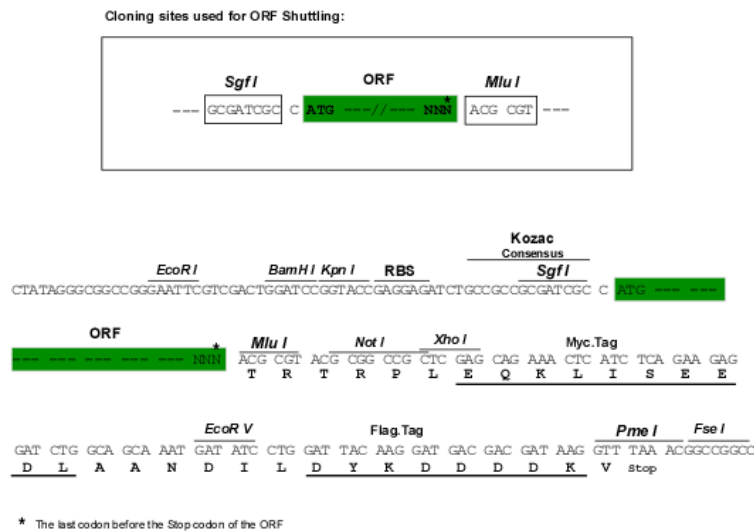
MAATCEISNIFSNYFSAMYSSSEDSTLASVPPAATFGADDLVLTLNPPQMSLEGTEKASWLGEQPQFWSKT
 QVLDWISYQVEKNKYDASAIIDFSRCDMDGATLNCNCALEELRLVFGPLGDQLHAQLRDLTSSSSDELSWII
 ELLEKDGMAFQEALDPGPFQDQSPFAQELLDDGQQASPYHPGSCGAGAPSPGSSDVSTAGTGASRSSHSS
 DSGGSDVDLDPTDGKLFPSDGFDRDCKKGDPKHGKRKRGRPRKLKEYWDCLEGGKSKHAPRGTHLWEFIR
 DILIHPELNEGLMKWENRHEGVKFLRSEAVAQLWGQKKKNSNMTYEKLSRAMRYYYKREILERVGGRRLL
 VYKFGKNSSGWKEEEVLQSRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6082_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004433

ORF Size: 1113 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_004433.5](#)

RefSeq Size: 3149 bp

RefSeq ORF: 1116 bp

Locus ID: 1999

UniProt ID: [P78545](#)

Cytogenetics: 1q32.1

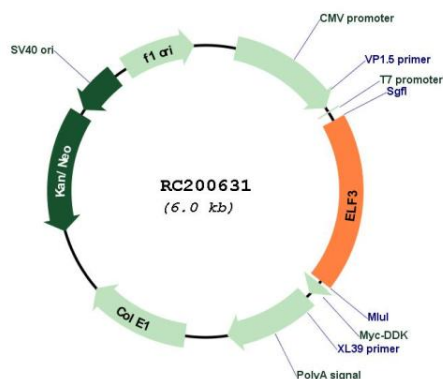
Domains: ETS, AT_hook, SAM_PNT

Protein Families: Transcription Factors

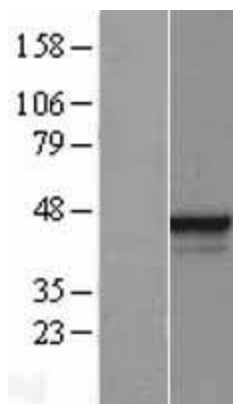
MW: 41.5 kDa

Gene Summary: Transcriptional activator that binds and transactivates ETS sequences containing the consensus nucleotide core sequence GGA[AT]. Acts synergistically with POU2F3 to transactivate the SPRR2A promoter and with RUNX1 to transactivate the ANGPT1 promoter. Also transactivates collagenase, CCL20, CLND7, FLG, KRT8, NOS2, PTGS2, SPRR2B, TGFB2 and TGM3 promoters. Represses KRT4 promoter activity. Involved in mediating vascular inflammation. May play an important role in epithelial cell differentiation and tumorigenesis. May be a critical downstream effector of the ERBB2 signaling pathway. May be associated with mammary gland development and involution. Plays an important role in the regulation of transcription with TATA-less promoters in preimplantation embryos, which is essential in preimplantation development (By similarity).[UniProtKB/Swiss-Prot Function]

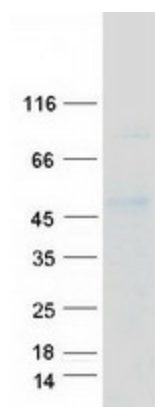
Product images:



Circular map for RC200631



Western blot validation of overexpression lysate (Cat# [LY426477]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225564] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ELF3 protein (Cat# [TP300631]). The protein was produced from HEK293T cells transfected with ELF3 cDNA clone (Cat# RC200631) using MegaTran 2.0 (Cat# [TT210002]).