

## Product datasheet for RC225564

### ESE1 (ELF3) (NM\_001114309) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ESE1 (ELF3) (NM_001114309) Human Tagged ORF Clone
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:	>RC225564 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCATGTACAGCTCGGAGGACT  
CCACCCCTGGCCTCTGTTCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTACTGACCCGAGCAACCC  
CCAGATGTCATTGGAGGGTACAGAGAAGCCAGCTGGTTGGGGAAACAGCCCCAGTTCTGGTCGAAGACG  
CAGGTTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCAC  
GATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGCCTCT  
GGGGACCAACTCCATGCCAGCTGCGAGACCTCACTTCCAGCTTCTGATGAGCTCAGTTGGATCATT  
GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCC  
CCTTTGCCAGGAGCTGTGGACGACGGTCCAGCAAGCCAGCCCTACCACCCCGGAGCTGTGGCGCAGG  
AGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGTCTCTCGGAGCTCCCACTCCTCA  
GACTCCGGTGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCAGCGATGGTTTTCTGTG  
ACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGCCCCGAAAGCTGAGCAAAGAGTA  
CTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCAGAGGCACCCACCTGTGGGAGTTTCATCCGG  
GACATCCTCATCCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCA  
AGTTCCTGCGCTCCGAGGCTGTGGCCAACTATGGGGCCAAAAGAAAAGAACAGCAACATGACCTACGA  
GAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTC  
GTCTACAAGTTTGGCAAAAACCAAGCGCTGGAAGGAGGAAGAGTTCTCCAGAGTCGGAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC225564 protein sequence  
Red=Cloning site Green=Tags(s)

MAATCEISNIFSNYFSAMYSSDSTLASVPPAATFGADDLVLTL SNPQMSLEGTEKASWLGEQPQFWSKT  
 QVLDWISYQVEKNKYDASAI DF SRCDMDGATL CNCAL EELRL VFGPLGDQLHAQLRDLTSSSSDEL SWII  
 ELLEKDGMAFQEALDPGPF DQGSPFAQELLDDGQQASPYHPGSCGAGAPSPGSSDVSTAGTGASRSSHS  
 DSGGSDVDL DPTDGKLFPSDGF RDCKKGD PKHGKRKRGRPRKL SKEYWDCLEGGKSKHAPRGTHL WEFIR  
 DILIHPELNEGLMKWENRHEGVFKFLRSEAVAQLWGQKKKNSNMTYEKLSRAMRYYYKREIL ERVDGRRLL  
 VYKFGKNSSGWKEEEVLQSRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6082\\_e05.zip](https://cdn.origene.com/chromatograms/mk6082_e05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001114309

**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.

**RefSeq:** [NM\\_001114309.2](#)

**RefSeq Size:** 3263 bp

**RefSeq ORF:** 1116 bp

**Locus ID:** 1999

**UniProt ID:** [P78545](#)

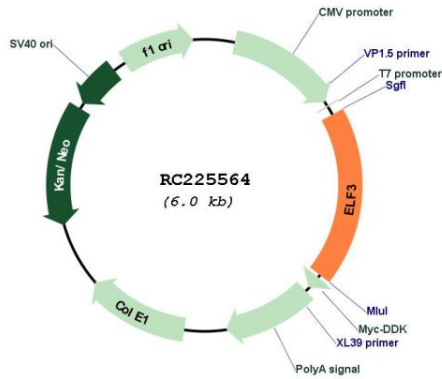
**Cytogenetics:** 1q32.1

**Protein Families:** Transcription Factors

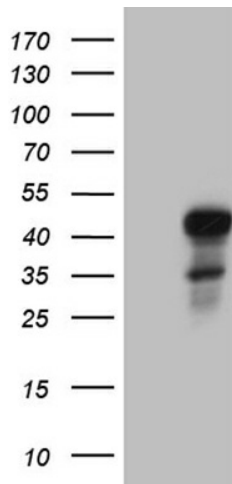
**MW:** 41.5 kDa

**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, TGFBR2 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]

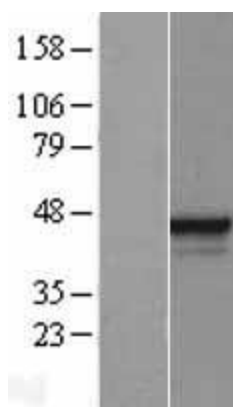
Product images:



Circular map for RC225564



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ELF3 (Cat# RC225564, 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-ELF3 (Cat# [TA809989])(1:2000). Positive lysates [LY426477] (100ug) and [LC426477] (20ug) can be purchased separately from OriGene.



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]).