

Product datasheet for **RC227285**

ERG (NM_001136154) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERG (NM_001136154) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERG
Synonyms:	erg-3; p55
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC227285 representing NM_001136154
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATTACAGACTGTCCCGACCCAGCAGCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGT
 CGTTGTTTGAGTGTGCCTACGGAACGCCACACCTGGCTAAGACAGAGATGACCGCTCCTCCTCCAGCGA
 CTATGGACAGACTTCCAAGATGAGCCCACGCGTCCCTCAGCAGGATTGGCTGTCTCAACCCACGCCAGG
 GTCACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGAACTCTCCTGATGAATGCAGTG
 TGGCCAAAGCGGGAAGATGGTGGGCAGCCAGACACCGTTGGGATGAACTACGGCAGCTACATGGAGGA
 GAAGCACATGCCACCCCAACATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTA
 TGGAGTACAGACCATGTGCGGCAGTGGCTGGAGTGGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACA
 TCTTGTTATTCCAGAACATCGATGGGAAGGAAGTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCAC
 CCCAGCTACAACGCCGACATCCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTTCCACATTTG
 ACTTCAGATGATGTTGATAAAGCCTTACAAAACCTCCACGGTTAATGCATGCTAGAAAACACAGGGGGTG
 CAGCTTTTATTTCCAAATACTTCAGTATATCCTGAAGCTACGCAAAGAATTACAACTAGGCCAGATTT
 ACCATATGAGCCCCCAGGAGATCAGCCTGGACCGGTACGGCCACCCACGCCAGTCGAAAAGCTGCT
 CAACCATCTCCTTCCACAGTGCCAAAACCTGAAGACCAGCGTCTCAGTTAGATCCTTATCAGATTTCTG
 GACCAACAAGTAGCCGCTTGAAGTCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCTCCTGGAGCT
 CCTGTGCGACAGTCCAACCTCAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGAT
 CCCGACGAGGTGGCCCGCGCTGGGAGAGCGGAAGAGCAAACCAACATGAACTACGATAAGCTCAGCC
 GCGCCCTCCGTTACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCTACAAGTT
 CGACTTCCACGGGATCGCCAGGCCCTCAGCCCAACCCCGGAGTCTCTCTGTACAAGTACCCCTCA
 GACCTCCCGTACATGGGCTCCTATCAGCCCAACACAGAAGATGAACTTTGTGGCGCCCAACCTCCAG
 CCCTCCCGTGACATCTTCCAGTTTTTTGCTGCCCAAAACCCATACTGGAATTCACCAACTGGGGGTAT
 ATACCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGCACTTACTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC227285 representing NM_001136154
 Red=Cloning site Green=Tags(s)

MIQTVDPAAHIKEALSVVSEDQSLFECAYGTPHLAKTEMTASSSSDYGQTSKMSRPVQQDWLSQPPAR
 VTIKMECNPSQVNGSRNSPDECSVAKGGKMGVSPDTVGMNYGSYMEEKHMPPNMTNERRVIVPADPTL
 WSTDHVRQWLEWAVKEYGLPDVNILLFQNIIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPHPL
 TSDDVDKALQNSPRLMHARNTGGAAFIFPNTSVYPEATQRITTRPDLPYEPPRRSAWTGHGHTPQSKAA
 QPSPSTVPKTEDQRPQLDPYQILGPTSSRLANPGSQIQLWQFLLELLSDSSNSSCITWEGTNGEFKMTD
 PDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDHFGIAQALQPHPPPESSLYKYP
 SLDLPMGSHYAHQKMNMFVAPHPALPVTSSFFAAPNPYWSPTGGIYPNTRLPTSHMPSHLGTY

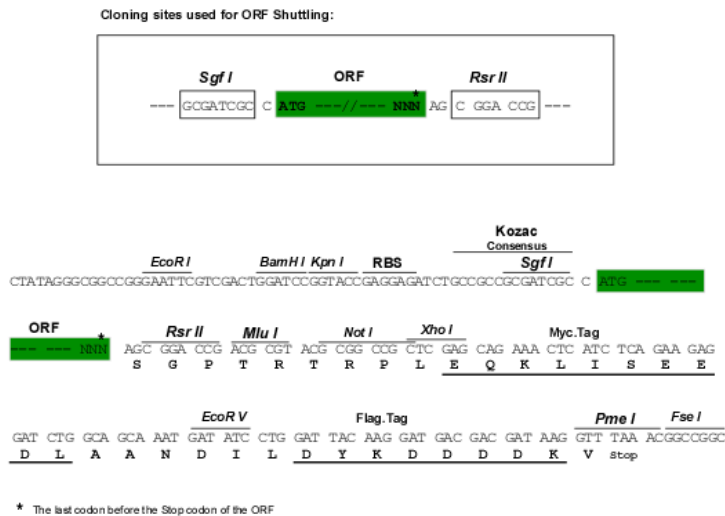
SGPTRRRLEQKLISEEDLAANDILDYKDDDDK

Chromatograms:

https://cdn.origene.com/chromatograms/ja1871_c07.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_001136154

ORF Size: 1458 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).

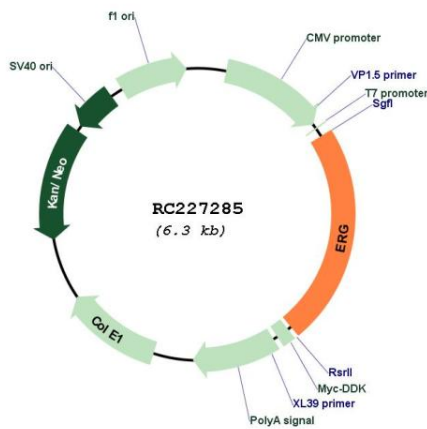
Reconstitution Method:

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.

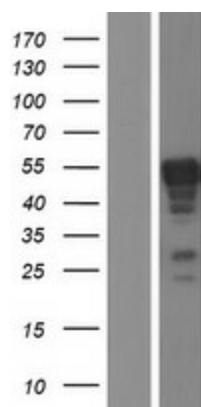
RefSeq: [NM_001136154.1, NP_001129626.1](#)
RefSeq ORF: 1461 bp
Locus ID: 2078
UniProt ID: [P11308](#)
Cytogenetics: 21q22.2
Protein Families: Druggable Genome, Transcription Factors
MW: 54.4 kDa

Gene Summary: This gene encodes a member of the erythroblast transformation-specific (ETS) family of transcriptions factors. All members of this family are key regulators of embryonic development, cell proliferation, differentiation, angiogenesis, inflammation, and apoptosis. The protein encoded by this gene is mainly expressed in the nucleus. It contains an ETS DNA-binding domain and a PNT (pointed) domain which is implicated in the self-association of chimeric oncoproteins. This protein is required for platelet adhesion to the subendothelium, inducing vascular cell remodeling. It also regulates hematopoiesis, and the differentiation and maturation of megakaryocytic cells. This gene is involved in chromosomal translocations, resulting in different fusion gene products, such as TMPSSR2-ERG and NDRG1-ERG in prostate cancer, EWS-ERG in Ewing's sarcoma and FUS-ERG in acute myeloid leukemia. More than two dozens of transcript variants generated from combinatorial usage of three alternative promoters and multiple alternative splicing events have been reported, but the full-length nature of many of these variants has not been determined. [provided by RefSeq, Apr 2014]

Product images:



Circular map for RC227285



Western blot validation of overexpression lysate (Cat# [LY427827]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227285 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).