

## Product datasheet for **RC232835**

### ERG (NM\_001243428) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ERG (NM_001243428) 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)



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**ORF Nucleotide Sequence:**

>RC232835 representing NM\_001243428  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATTACAGACTGTCCCGACCCAGCAGCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGT  
 CGTTGTTTGAGTGTGCCTACGGAACGCCACACCTGGCTAAGACAGAGATGACCGGTCCTCCTCCAGCGA  
 CTATGGACAGACTTCCAAGATGAGCCCACGCGTCCCTCAGCAGGATTGGCTGTCTCAACCCACAGCCAGG  
 GTCACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGAACTCTCCTGATGAATGCAGTG  
 TGGCCAAAGGCGGAAGATGGTGGGCAGCCAGACACCGTTGGGATGAACTACGGCAGCTACATGGAGGA  
 GAAGCACATGCCACCCCAACATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTA  
 TGGAGTACAGACCATGTGCGGCAGTGGCTGGAGTGGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACA  
 TCTTGTTATTCCAGAACATCGATGGGAAGGAAGTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCAC  
 CCCAGCTACAACGCCGACATCCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTTCCACATTTG  
 ACTTCAGATGATGTTGATAAAGCCTTACAAAACCTCCACGGTTAATGCATGCTAGAAAACACAGGGGGTG  
 CAGCTTTTATTTCCAAATACTTCAGTATATCCTGAAGCTACGCAAAGAATTACAACTAGGCCAGATTT  
 ACCATATGAGCCCCCAGGAGATCAGCCTGGACCGGTACGGCCACCCACGCCAGTCGAAAAGCTGCT  
 CAACCATCTCCTTCCACAGTGCCAAAACCTGAAGACCAGCGTCTCAGTTAGATCCTTATCAGATTTCTG  
 GACCAACAAGTAGCCGCTTGAAGTCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCTCCTGGAGCT  
 CCTGTGCGACAGTCCAACCTCAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGAT  
 CCCGACGAGGTGGCCCGCGCTGGGAGAGCGGAAGAGCAAACCAACATGAACTACGATAAGCTCAGCC  
 GCGCCCTCGTTACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCTACAAGTT  
 CGACTTCCACGGGATCGCCAGGCCCTCAGCCCAACCCCGGAGTCTCTGTACAAGTACCCCTCA  
 GACCTCCCGTACATGGGCTCCTATCAGCCCAACACAGAAGATGAACTTTGTGGCGCCCAACCTCCAG  
 CCCTCCCGTGACATCTTCCAGTTTTTTGCTGCCCAAAACCCATACTGGAATCACCAACTGGGGGTAT  
 ATACCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGCACTTACTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:**

>RC232835 representing NM\_001243428  
 Red=Cloning site Green=Tags(s)

MIQTVDPAAHIKEALSVVSEDQSLFECAYGTPHLAKTEMTASSSSDYGQTSKMSRPVQQDWLSQPPAR  
 VTIKMECNPSQVNGSRNSPDECSVAKGGKMGVSPDTVGMNYGSYMEEKHMPPNMTNERRVIVPADPTL  
 WSTDHVRQWLEWAVKEYGLPDVNILLFQNIIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPHPL  
 TSDVDKALQNSPRLMHARNTGGAEIFPNTSVYPEATQRITTRPDLPYEPPRRSAWTGHGHTPQSKAA  
 QPSPSTVPKTEDQRPQLDPYQILGPTSSRLANPGSQIQLWQFLLELLSDSSNSSCITWEGTNGEFKMTD  
 PDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDHFGIAQALQPHPPPESSLYKYP  
 SLDLPMGSHYAHQKMNFAVPHPPALPVTSSSFFAAPNPYWSPTGGIYPNTRLPTSHMPSHLGTY

**SGP**TRTRPLEQKLISEEDLAANDILDYKDDDDK

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja1871\\_c07.zip](https://cdn.origene.com/chromatograms/ja1871_c07.zip)

**Restriction Sites:**

Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_001243428

**ORF Size:** 1458 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\\_001243428.1](#), [NP\\_001230357.1](#)

**RefSeq Size:** 5139 bp

**RefSeq ORF:** 1461 bp

**Locus ID:** 2078

**UniProt ID:** [P11308](#)

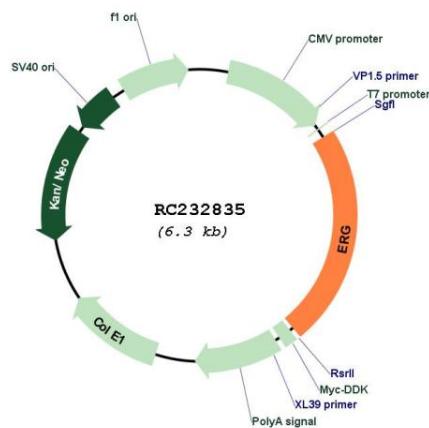
**Cytogenetics:** 21q22.2

**Protein Families:** Druggable Genome, Transcription Factors

**MW:** 54.6 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 RC232835