

## Product datasheet for **RC232584**

### ERG (NM\_001243429) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ERG (NM_001243429) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERG
Synonyms:	erg-3; p55
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC232584 representing NM_001243429 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGTGGGCGCCAGACACCGTTGGGATGAACTACGGCAGCTACATGGAGGAGAAGCACATGCCACCCC  
CAAACATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGT  
GCGGCAGTGGCTGGAGTGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAAC  
ATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCCCAGCTACAACGCCG  
ACATCCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTTCCACATTTGACTTCAGATGATGTTGA  
TAAAGCCTTACAAAACCTCTCCACGGTAAATGCATGCTAGAAAACACAGATTTACCATATGAGCCCCCAGG  
AGATCAGCCTGGACCGGTACGGCCACCCACGCCCCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAG  
TGCCAAAACCTGAAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGACCAACAAGTAGCCGCT  
TGCAAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTGGACAGCTCCAAC  
TCCAGCTGCATCACCTGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGCCCGCC  
GCTGGGGAGAGCGGAAGAGCAAACCAACATGAACTACGATAAGCTCAGCCGCGCCCTCCGTTACTACTA  
TGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCCTACAAGTTCGACTTCCACGGGATCGCC  
CAGGCCCTCCAGCCCCACCCCGGAGTCATCTGTACAAAGTACCCCTCAGACCTCCCGTACATGGGCT  
CCTATCACGCCACCCACAGAAGATGAACTTTGTGGCGCCACCCCTCCAGCCCTCCCGTGACATCTTC  
CAGTTTTTTTGTGCCCCAAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACTAGGCTC  
CCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC232584 representing NM\_001243429  
 Red=Cloning site Green=Tags(s)

MVGSPDTVGMNYGSYMEEKHMPPPNMTTNERRIVPADPTLWSTDHVRQWLEWAVKEYGLPDVNILLFQN  
 IDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPLHTSDDVDKALQNSPRLMHARNTDLPYEPPR  
 RSAWTGHGHPTPQSKAAQSPSTVPKTEDQRPQLDPYQILGPTSSRLANPGSGQIQLWQFLELLSDSSN  
 SSCITWEGTNGEFKMTDPDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDHFGIA  
 QALQPHPESSLKYPSDLPYMGSYHAHPQKMNFAVPHPPALVPTSSSFFAAPNPYWNSPTGGIYPNTRL  
 PTHMPSHLGTYT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

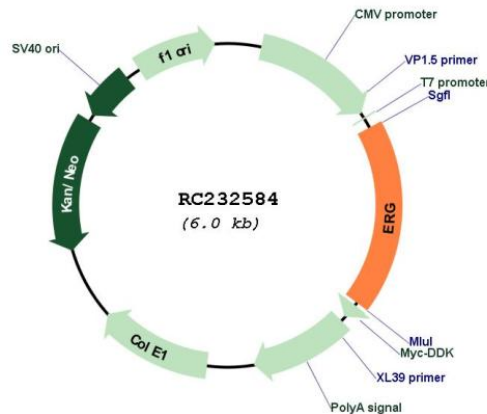
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001243429

<b>ORF Size:</b>	1089 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001243429.1</a> , <a href="#">NP_001230358.1</a>
<b>RefSeq Size:</b>	4703 bp
<b>RefSeq ORF:</b>	1092 bp
<b>Locus ID:</b>	2078
<b>UniProt ID:</b>	<a href="#">P11308</a>
<b>Cytogenetics:</b>	21q22.2
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	41.8 kDa

**Gene Summary:**

This gene encodes a member of the erythroblast transformation-specific (ETS) family of transcription 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]