

## Product datasheet for **RC208093**

### **ERG (NM\_182918) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ERG (NM_182918) 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:**

>RC208093 representing NM\_182918  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCCAGCACTATTAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGTCGTTGTTTGTGAGTGTGCCTACG  
 GAACGCCACACCTGGCTAAGACAGAGATGACCGGTCCTCCTCCAGCGACTATGGACAGACTTCCAAGAT  
 GAGCCACCGCTCCCTCAGCAGGATTGGCTGTCTCAACCCACAGCAGGGTCACCATCAAAATGGAATGT  
 AACCTAGCCAGGTGAATGGCTCAAGAACTCTCCTGATGAATGCAGTGTGGCCAAAGCGGGAAGATGG  
 TGGGCAGCCAGACACCGTTGGGATGAACTACGGCAGCTACATGGAGGAGAAGCACATGCCACCCCAAA  
 CATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGG  
 CAGTGGCTGGAGTGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTATTCCAGAACATCG  
 ATGGGAAGGAAGTGTCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCACAGCTACAATGCCGACAT  
 CCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTCCACATTTGACTTCAGATGATGTTGATAAA  
 GCCTTACAAAACCTCCACGGTTAATGCATGCTAGAAACACAGGGGTGCAGCTTTTATTTTCCCAATA  
 TTTCAGTATATCCTGAAGCTACGCAAAGAATTACAACAGGCCAGATTTACCATATGAGCCCCCAGGAG  
 ATCAGCCTGGACCGGTCACGGCCACCCACGCCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTG  
 CCCAAAACGAAGACCAGCGTCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCTTG  
 CAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTGCGACAGCTCAAAC  
 CAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGCCCGGCG  
 TGGGAGAGCGGAAGAGCAAACCAACATGAACACGTAAGCTCAGCCGCGCCCTCCGTTACTACTATG  
 ACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCTACAAGTTCGACTTCCAGGGGATGCCCA  
 GGCCCTCCAGCCCCACCCCGGAGTCATCTGTACAAGTACCCTCAGACCTCCCGTACATGGGCTCC  
 TATCACGCCACCCACAGAAGATGAACTTTGTGGCGCCACCCCTCCAGCCCTCCCGTGACATCTTCCA  
 GTTTTTTGTGCCCAAACCCATACTGGAATTCACCAACTGGGGTATATACCCCAACACTAGGCTCCC  
 CACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:**

>RC208093 representing NM\_182918  
 Red=Cloning site Green=Tags(s)

MASTIKEALSVSEDSQSLFECAYGTPHLAKTEMTASSSSDYGQTSKMSRPVPPQDWSQPPARVTIKMEC  
 NPSQVNGSRNSPDECSVAKGGKMGVSPDVTGMNYGSYMEEKHMPPNMTTNERIVVPADPTLWSTDHVR  
 QWLEWAVKEYGLPDVNILLFQNIIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPHLTSDDVDK  
 ALQNSPRLMHARNTGGAAFIFPNTSVYPEATQRITTRPDLPEPPRRSAWTGHGHPTPQSKAAQSPSTV  
 PKTEDQRPQLDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSSNSSCITWEGTNGEFKMTDPDEVARR  
 WGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDHFGIAQALQPHPESSLYKYPSPDLPYMG  
 YHAHPQKMNFAVPHPPALPVTSSSFFAAPNPYWNSTGGIYPNTRLPTSHMPSHLGTYY

**SGP**TRRRLEQKLISEEDLAANDILDYKDDDDK**V**

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2697\\_e10.zip](https://cdn.origene.com/chromatograms/mg2697_e10.zip)

**Restriction Sites:**

Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_182918

**ORF Size:** 1437 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\\_182918.1](#)

**RefSeq Size:** 3055 bp

**RefSeq ORF:** 1440 bp

**Locus ID:** 2078

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

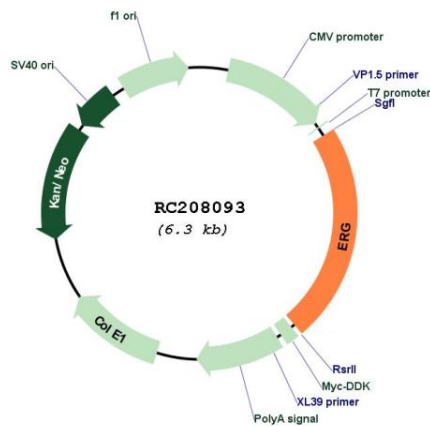
**Cytogenetics:** 21q22.2

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

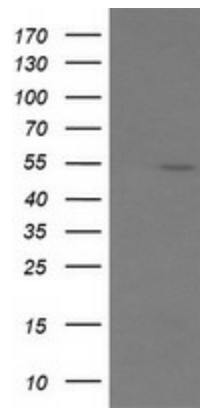
**MW:** 53.7 kDa

**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]

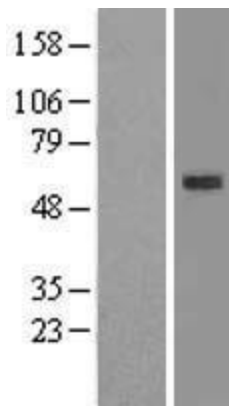
**Product images:**



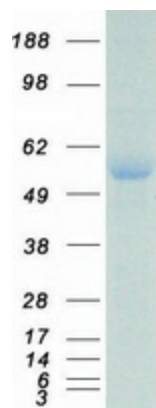
Circular map for RC208093



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ERG (Cat# RC208093, 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-ERG (Cat# [TA506076]). Positive lysates [LY403650] (100ug) and [LC403650] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403650]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208093 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ERG protein (Cat# [TP308093]). The protein was produced from HEK293T cells transfected with ERG cDNA clone (Cat# RC208093) using MegaTran 2.0 (Cat# [TT210002]).