

Product datasheet for **RG208093**

ERG (NM_182918) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERG (NM_182918) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ERG
Synonyms:	erg-3; p55
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG208093 representing NM_182918
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAGCACTATTAAGGAAGCCTTATCAGTTGTGAGTGAAGACCAGTCGTTGTTTGTGAGTGTGCCTACG
 GAACGCCACACCTGGCTAAGACAGAGATGACCGGTCCTCCTCCAGCAGCTATGGACAGACTTCCAAGAT
 GAGCCACCGCTCCCTCAGCAGGATTGGCTGTCTCAACCCACAGCCAGGGTCACCATCAAAATGGAATGT
 AACCTAGCCAGGTGAATGGCTCAAGAACTCTCCTGATGAATGCAGTGTGGCCAAAGCGGGAAGATGG
 TGGGCAGCCAGACACCGTTGGGATGAACTACGGCAGCTACATGGAGGAGAAGCACATGCCACCCCAAA
 CATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGG
 CAGTGGCTGGAGTGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTATTCCAGAACATCG
 ATGGGAAGGAAGTGTCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCACAGCTACAATGCCGACAT
 CCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTCCACATTTGACTTCAGATGATGTTGATAAA
 GCCTTACAAAACCTCCACGGTTAATGCATGCTAGAAACACAGGGGTGCAGCTTTTATTTTCCCAATA
 TTTCAGTATATCCTGAAGCTACGCAAAGAATTACAACAGGCCAGATTTACCATATGAGCCCCCAGGAG
 ATCAGCCTGGACCGGTCACGGCCACCCACGCCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTG
 CCCAAAACGAAGACCAGCGTCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCTTG
 CAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCTGGAGCTCCTGTGCGGACAGCTCAAAC
 CAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGCCCGGCGC
 TGGGGAGAGCGGAAGAGCAAACCAACATGAACTACGATAAGCTCAGCCGCGCCCTCCGTTACTACTATG
 ACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCCTACAAGTTCGACTTCCACGGGATCGCCCA
 GGCCCTCCAGCCCCACCCCGGAGTCATCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCC
 TATCACGCCACCCACAGAAGATGAACTTTGTGGCGCCACCCCTCCAGCCCTCCCGTGACATCTTCCA
 GTTTTTTGTGCCCAAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACTAGGCTCCC
 CACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG208093 representing NM_182918
 Red=Cloning site Green=Tags(s)

MASTIKEALSVVSEDQSLFECAYGTPHLAKTEMTASSSSDYGQTSKMSPRVPQQDWLSQPPARVTIKMEC
 NPSQVNGSRNSPDECSVAKGGKMGVSPDVTGMNYGSYMEEKHMPPNMTTNERIVPADPTLWSTDHVR
 QWLEWAVKEYGLPDVNIILLFQNIIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPHPLTSDVDK
 ALQNSPRLMHARNTGGAEIFPNTSVYPEATQRITTRPDLPEPPRRSAWTGHGHTPQSKAAQSPSTV
 PKTEDQRPQLDPYQILGPTSSRLANPGSQIQLWQFLLELLSDSSNSSCITWEGTNGEFKMTDPDEVARR
 WGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDHGIQALQPHPESSLYKPSDLPYMGS
 YHAHPQKMNMFVAPHPALPVTSSSFFAAPNPYWNSTGGIYPNTRLPTSHMPSHLGTYY

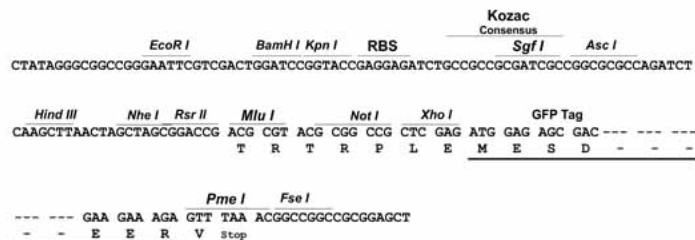
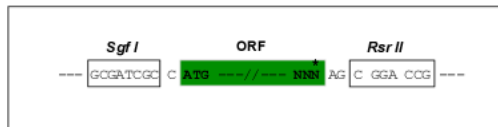
SGP**TRRRLE** – GFP Tag – V

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:


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

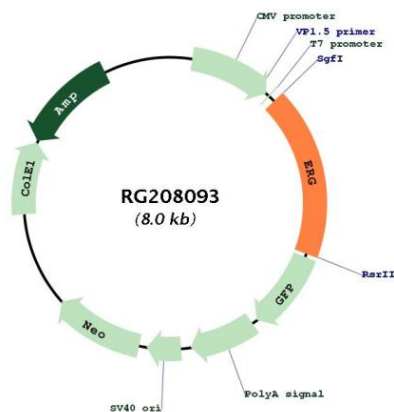
UniProt ID: [P11308](#)

Cytogenetics: 21q22.2

Protein Families: Druggable Genome, Transcription Factors

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 RG208093