

Product datasheet for **RG232835**

ERG (NM_001243428) Human Tagged ORF Clone

Product data:

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



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ORF Nucleotide Sequence:

>RG232835 representing NM_001243428
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATTACAGACTGTCCCGACCCAGCAGCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGT
 CGTTGTTTGTAGTGTGCCTACGGAACGCCACACCTGGCTAAGACAGAGATGACCGGTCCTCCTCCAGCGA
 CTATGGACAGACTTCCAAGATGAGCCCACGCGTCCCTCAGCAGGATTGGCTGTCTCAACCCACAGCCAGG
 GTCACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGAACTCTCCTGATGAATGCAGTG
 TGGCCAAAGGCGGAAGATGGTGGGCAGCCAGACACCGTTGGGATGAACTACGGCAGCTACATGGAGGA
 GAAGCACATGCCACCCCAACATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTA
 TGGAGTACAGACCATGTGCGGCAGTGGCTGGAGTGGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACA
 TCTTGTATTCCAGAACATCGATGGGAAGGAAGTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCAC
 CCCAGCTACAACGCCGACATCCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTTCCACATTTG
 ACTTCAGATGATGTTGATAAAGCCTTACAAAACCTCCACGGTTAATGCATGCTAGAAAACACAGGGGGTG
 CAGCTTTTATTTCCAAATACTTCAGTATATCCTGAAGCTACGCAAAGAATTACAACTAGGCCAGATTT
 ACCATATGAGCCCCCAGGAGATCAGCCTGGACCGGTACGGCCACCCACGCCAGTCGAAAAGCTGCT
 CAACCATCTCCTTCCACAGTGCCCAAACTGAAGACCAGCGTCTCAGTTAGATCCTTATCAGATTTCTG
 GACCAACAAGTAGCCGCTTGAAGTCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCTCCTGGAGCT
 CCTGTGCGACAGTCCAAGTCCAGTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGAT
 CCCGACGAGTGGCCCGCGCTGGGAGAGCGGAAGAGCAAACCAACATGAACTACGATAAGCTCAGCC
 GCGCCCTCCGTTACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCTACAAGT
 CGACTTCCACGGGATCGCCAGGCCCTCCAGCCCAACCCCGGAGTCATCTGTACAAGTACCCCTCA
 GACCTCCCGTACATGGGCTCCTATCACGCCACCCACAGAAGATGAACTTTGTGGCGCCCAACCTCCAG
 CCCTCCCGTGACATCTTCCAGTTTTTTTGTGCCCAAAACCCATACTGGAATTCACCAACTGGGGGTAT
 ATACCCCAACACTAGGCTCCCCACAGCCATATGCCTTCTCATCTGGGCATTACTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG232835 representing NM_001243428
 Red=Cloning site Green=Tags(s)

MIQTVPDPAHHIKEALSVVSEDQSLFECAYGTPHLAKTEMTASSSSDYGQTSKMSRPVPPQDWSQPPAR
 VTIKMECNPSQVNGSRNSPDECSVAKGGKMGVSPDVTGMNYGSYMEEKHMPPNMTTNERRVIVPADPTL
 WSTDHVRQWLEWAVKEYGLPDVNILLFQNIIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPHPL
 TSDDVDKALQNSPRLMHARNTGGAAFIFPNTSVYPEATQRITTRPDLPEYPPRRSAWTGHGHTPQSKAA
 QPSPSTVPKTEDQRPQLDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSSNSSCITWEGTNGEFKMTD
 PDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKDFDHGIAQALQPHPPESLYKYPS
 DLPYMGSYHAHPQKMNFAVPHPPALPVTSSSFFAAPNPYWSPTGGIYPNTRLPTSHMPSHLGTY

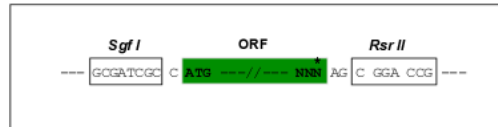
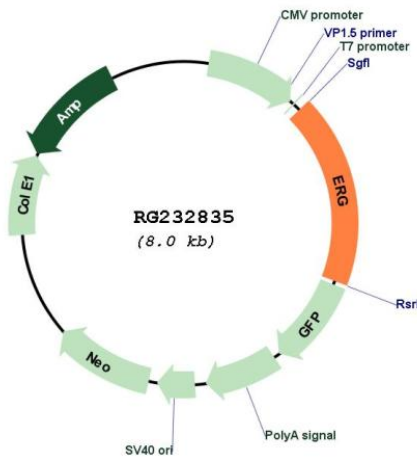
SGP**TRRRLE** - GFP Tag - V

Restriction Sites:

SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:


Plasmid Map:

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: | <ol style="list-style-type: none">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 |
| Gene Summary: | <p>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]</p> |