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Product datasheet for RG214948

ERC1 (NM_178039) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERC1 (NM_178039) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ERC1
Synonyms:	Cast2; ELKS; ERC-1; RAB6IP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG214948 representing NM_178039
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTATGGAAGTGCCCGCTCTGTTGGGAAGGTGGAGCCGAGCAGCCAGAGCCCTGGGCGTTCACCCAGGC
TTCCACGTTCCCCTCGCTTGGGTCACCGTCGAACCAACAGTACGGGAGGGAGTTCGGGAAGCAGTGTTGG
AGGTGGCAGTGGGAAAACCCTTTCAATGGAAAATATACAATCTTTAAATGCTGCCTATGCCACCTCTGGC
CCTATGTATCTAAGTGACCATGAAAATGTGGGTTCAGAAACACCTAAAAGCACCATGACACTTGGCCGTT
CTGGGGGACGTCTGCCTTACGGTGTTCGGATGACTGCTATGGGTAGTAGCCCCAATATAGCTAGCAGTGG
GGTTGCTAGTGACACCATAGCATTTGGAGAGCATCACCTCCCTCCTGTGAGTATGGCATCCACTGTACCT
CACTCCCTTCGTCAGGCGAGAGATAACACAATCATGGATCTGCAGACACAGCTGAAGGAAGTATTAAGAG
AAAATGATCTCTTGCGGAAGGATGTGGAAGTAAAGGAGAGCAAATTGAGTTCTTCAATGAATAGCATCAA
GACCTTCTGGAGCCCAGAGCTGAAGAAGGAACGAGCCCTGAGAAAAGATGAAGCTTCCAAAATCACCATT
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ATGAATTGCGGATCCAGAGGGACCTGAATCAGCTGTTTCAGCAGGATAGTAGCAGCAGGACTGGCGAACC
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GTTCTCAGATAGTAAACAGCACATTGAAGTGTTGAAGGAGTCCTTGACTGCTAAGGAGCAGAGGGCTGCC

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ATCCTGCAGACTGAGGTGGATGCTCTCCGATTGCGTTTGGAAGAGAAGGAAACCATGTTGAATAAAAAGA
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TGACCAGGCGGCTTGGGAGAATGAGCTGCAGAAGATGACCCGGGGGCAGCTTCAGGATGAGTTAGAGAAA
GGTGAACGGGACAATGCAGAACTGCAGGAGTTTGCCAACGCCATTCTTCAGCAGATAGCAGACCATTGTC
CCGACATCCTAGAGCAAGTGGTCAACGCCCTGGAAGAGTCCTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG214948 representing NM_178039
Red=Cloning site Green=Tags(s)

MYGSARSVGKVEPSSQSPGRSPRLPRSPRLGHRRTNSTGGSSGSSVGGGSGKTLSMENIQSLNAAYATSG
PMYLSDHENVGSETPKSTMTLGRSGGRLPYGVRMTAMGSSPNIASSGVASDTIAFGEHHLPPVSMASTVP
HSLRQARDNTIMDLQTQLKEVLRENDLLRKDVEVKESKLSSSMNSIKTFWSPELKKERALRKDEASKITI
WKEQYRVVQEENQHMQMTIQALQDELRIQRDLNQLFQQDSSSRTGEPCVAELTEENFQRLHAEHERQAKE
LFLLRKTLEEMELRIETQKQTLNARDESIKKLLEMLQSKGLSAKATEEDHERTRRLAEAEMHVHHLESLL
EQKEKENSMLREEMHRRFENAPDSAKTKALQTVIEMKDSKISSMERGLRDLEEEIQMLKSNGALSTEERE
EEMKQMEVYRSHSKFMKNKIGQVKQELSRKDTELLALQTKLETLTNQFSDSKQHIEVLKESLTAKEQRAA
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DKEKQMSSLKERVKSLQADTTNTDTALTTLEEALAEKERTIERLKEQRDRDEREKQEEIDNYKKDLKDLK
EKVSLLQGDLSEKEASLLDLKEHASSLASSGLKKDSRLKTLEIALEQKKEECLKMESQLKKAHEAALEAR
ASPEMSDRIQHLEREITRYKDESSKAQAEVDRLLEILKEVENEKNDKDKKIAELERQVKDQNKKVANLKH
KEQVEKKKSAQMLEEARRREDNLNDSSQQLQDSLRKKDDRIEELEEALRESVQITAEREMVLAQEESART
NAEKQVEELLMAMEKVKQELESMKAKLSSTQQSLAEKETHLTNLRAERRKHLEEVLEMKQEALLAAISEK
DANIALLELSSSKKKTQEEVAALKREKDRLVQQLKQQTQNRMKLMADNYEDDHFKSSHSNQTNHKPSPDQ
IIQPLLELDQNRSKLKLYIGHLTTLCHDRDPLILRGLTPPASYNLDDDQAAWENELQKMTRGQLQDELEK
GERDNAELQEFANAILQQIADHCPDILEQVVNALEESS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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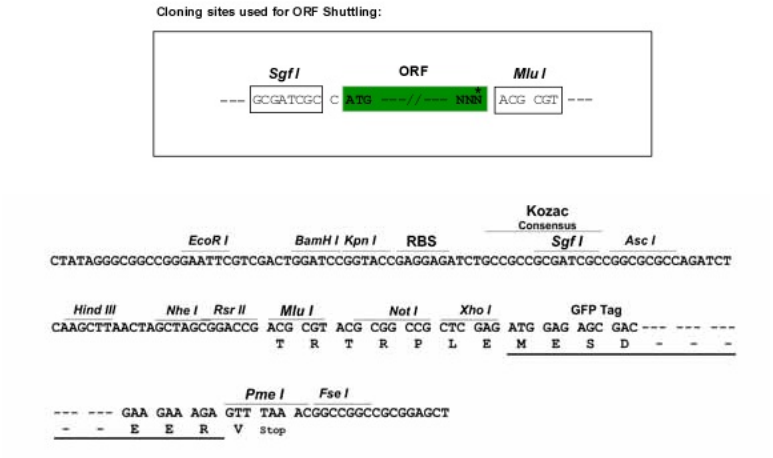
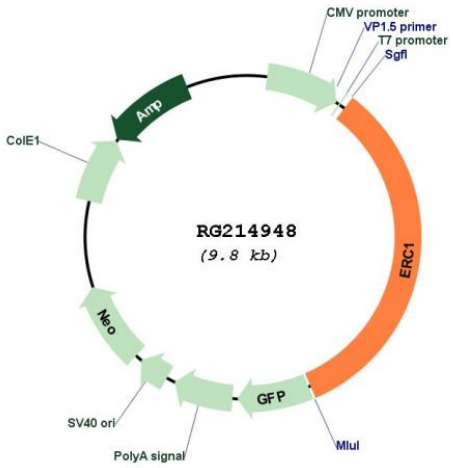
Cloning Scheme:



Plasmid Map:



ACCN: NM_178039

ORF Size: 3264 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.

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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_178039.4
RefSeq Size:	9229 bp
RefSeq ORF:	3267 bp
Locus ID:	23085
UniProt ID:	Q8IUD2
Cytogenetics:	12p13.33
Protein Families:	Druggable Genome
Gene Summary:	The protein encoded by this gene is a member of a family of RIM-binding proteins. RIMs are active zone proteins that regulate neurotransmitter release. This gene has been found fused to the receptor-type tyrosine kinase gene RET by gene rearrangement due to the translocation t(10;12)(q11;p13) in thyroid papillary carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]

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