

## Product datasheet for **SC107758**

### ERC1 (NM\_178039) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ERC1 (NM_178039) Human Untagged Clone
Tag:	Tag Free
Symbol:	ERC1
Synonyms:	Cast2; ELKS; ERC-1; RAB6IP2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_178039, the custom clone sequence may differ by one or more nucleotides

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ATGTATGGAAGTGCCCGCTCTGTTGGGAAGGTGGAGCCGAGCAGCCAGAGCCCTGGGCGTTCACCCAGGC
TTCACAGTTCCCCTCGCTTGGGTCAACGTCGAACCAACAGTACGGGAGGGAGTTCGGGAAGCAGTGTGG
AGGTGGCAGTGGGAAAACCCCTTTCAATGAAAAATATACAATCTTTAAATGCTGCCTATGCCACCTCTGGC
CCTATGTATCTAAGTGACCATGAAAATGTGGGTTCAGAAACACCTAAAAGCACCATGACACTTGGCCGTT
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GGTTGCTAGTGACACCATAGCATTGGAGAGCATCACCTCCCTCCTGTGAGTATGGCATCCACTGTACCT
CACTCCCTTCGTCAGGCGAGAGATAACACAATCATGGATCTGCAGACACAGCTGAAGGAAGTATTAAGAG
AAAATGATCTCTTGCAGGAGGATGTGGAAGTAAAGGAGAGCAAATGAGTTCTTCAATGAATAGCATCAA
GACCTTCTGGAGCCCAGAGCTGAAGAAGGAACGAGCCCTGAGAAAAGATGAAGCTTCCAAAATCACCATT
TGAAGGAACAGTACAGAGTTGTACAGGAGGAAAACCAGCACATGCAGATGACAAATCCAGGCTCTCCAGG
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ATCCTGCAGACTGAGGTGGATGCTCTCCGATTGCGTTTGAAGAGAAGGAAACCATGTTGAATAAAAAGA
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GTTGGATGTGAAGGAGCGGAAGGTTAATGTTCTTCAGAAGAAGATTGAAAATCTTCAAGAGCAGCTTAGA  
 GACAAGGAAAAGCAGATGAGCAGCTTGAAAAGACGGGTCAAATCCTTGCAGGCTGACACCACCAACTG  
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 GAGGGACAGAGATGAGCGAGAGAAGCAAGAGGAAATTGATAACTACAAAAAGATCTTAAAGACTTGAAG  
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 ATCATCCAGCCCTCTTAGAACTTGACCAAAATAGAAGTAAATTAAGTTGTACATTGGACACCTGACAA  
 CCCTCTGCCATGACCGAGACCCCTGATCTCCGTGGACTCACTCCACCAGCTTCTATAACTTGGACGA  
 TGACCAGGCGGCTTGGGAGAATGAGCTGCAGAAGATGACCCGGGGCAGCTTCAGGATGAGTTAGAGAAA  
 GGTGAACGGGACAATGCAGAAGTGCAGGAGTTTCCCAACGCCATTCTTCAGCAGATAGCAGACCATTGTC  
 CCGACATCCTAGAGCAAGTGGTCAACGCCCTGGAAGAGTCTCTTGA

**5' Read Nucleotide  
Sequence:**

>OriGene 5' read for NM\_178039 unedited  
 GGCCGCGAAATTCGCACGAGGGGCGCGGTAGTGGCGGCGGCGGCTGCCCGGGCGGCA  
 GCGGCAGCAGTAGCGGCAGCCCTGAGGACGATATGGTGAAGATACTTCTTCAAGATTGG  
 ACAGCTGGGGACCTTCTTCTGATTAACCTTAAACCAACTTGTAGCCATAGAGACACCTCA  
 CAAGGTTCCCATTTTTGTTGTTGTTGTTGATTTTCTGCTCACACCTTTCCTGACCTT  
 GCAACCATGTATGGAAGTGCCCGCTCTGTTGGGAAGGTGGAGCCGAGCAGCCAGAGCCCT  
 GGGCGTTCACCCAGGCTTCCACGTTCCCTCGCTTGGGTCACCGTCAACCAACAGTACG  
 GGAGGGAGTTCGGGAAGCAGTGTGGAGGTGGCAGTGGGAAAACCTTTCAATGGAAAAAT  
 ATACAATCTTTAAATGCTGCCTATGCCACCTCTGGCCCTATGTATCTAAGTGACCATGAA  
 AATGTGGGTTTCAGAAACACCTAAANAGCACCATGACACTTGGCCGTTCTGGGGGACGCT  
 GCCTTACGGTGTTCGGATGACTGCTATGGGTAGTAGCCCAATATAGCTAGCAGTGGNG  
 GTTGCTAGTGACACCATAGCATTTCGAGAGCATACCTCCCTCCTGTGAGTATGGCATCC  
 ACTGTACCTCACTCCCTTCGTCAGGCGAGAGATAACACAAATCATGGATCTGCAGACACA  
 GCTGAANGGAAGTATTAAGAGAAAATGATCTCTTGCNAAGATNGNNGAAGTAAAGGAG  
 ACNAANTTTGAGTTCTTTCATGAAATAGCATCAGAAGTTTNCAGCCANAGCTTGAGAA  
 GAACGAGCCTGAGAAAAGATGAGCTC

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_178039 unedited CAGGNCCAGNAAAGCACTGGGGNAGGGTCACAGGGATGCCACCCGTTTTCTGTTCAGGAA AAGCTATGACCGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTTTTAAATCTTTTTGAAATTTTTTTTTGCCCCTTTAGGAAAAAGCA CCTTTTTTGATATTAACACTCACCTTTTTGGTCCATTGGAGGCATCCTTTCACCCTTT TTTTTTTAATTCATTCTGGTTTCATTCTCATTCAAAGGACAGGAGGTGAAAGGCTC CTCTCTCCATGGCTTTTTTTCAGGGCAAAGCCACCATCTCCCAATTTCTCCATTGTTT ATAAACAAATTGCTTTTTTTCAGAAAGATTCAACCTTTTATTTACCTGGACTTCAAGAA GGTTAGTGTGGAGACCAATTCCAACCCAAAATGGTCTAGTAATATTGCCTATGTA AAAAC CGTCTTGAATCACATTTTTTAATTGACCCATTTGGAATAAATTTTTTTTTGTTTGTTT CCCAAAAGGTTCTGTACACTTTTCTCGTAATTTTTTTTTTTTTGGCCCTGGGTAAAC TCCACGAGTTTCTCTTAAACAGTTTCAAAGATCTTTTTCCGGCGGTTCCACTTTTTG TCTTGAATTTTCAGAAAATTGGTCTTTTTTCTCTAAAAAAATTGCTTTAGCAACTTCCC TACTTTTTTGAATCTCCATTACACTTTTTTTTTCTAATCTACAAAATCCACCCACGA AACTTTTTTTTATACTCATATCCGCCCACTTCCCTTTTAATTCTCCCATTTTAAATCCA AACTTTGTGCGACTCTCTCCCAACATCTAAAACACGCGCTTCCATCATTACTACC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_178039
<b>Insert Size:</b>	4000 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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_178039.1</a> , <a href="#">NP_829883.1</a>
<b>RefSeq Size:</b>	6809 bp
<b>RefSeq ORF:</b>	3267 bp
<b>Locus ID:</b>	23085
<b>UniProt ID:</b>	<a href="#">Q8IUD2</a>
<b>Cytogenetics:</b>	12p13.33
<b>Protein Families:</b>	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]

Transcript Variant: This variant (delta) lacks an alternate in-frame exon in the central coding region, compared to variant epsilon, resulting in a shorter isoform (delta), compared to isoform epsilon. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.