

Product datasheet for RC213864

ERC1 (NM_178040) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERC1 (NM_178040) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERC1
Synonyms:	Cast2; ELKS; ERC-1; RAB6IP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213864 representing NM_178040 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTATGGAAGTGCCCGCTCTGTTGGGAAGGTGGAGCCGAGCAGCCAGAGCCCTGGGCGTTCACCCAGGC
TTCCACGTTCCCCTCGTTGGGTCACCGTCGAACCAACAGTACGGGAGGGAGTTCGGGAAGCAGTGTGG
AGGTGGCAGTGGGAAAACCCCTTCAATGGAAAATATACAATCTTAAATGCTGCCTATGCCACCTCTGGC
CCTATGTATCTAAGTGACCATGAAAATGTGGGTTTCAGAAACACCTAAAAGCACCATGACACTTGGCCGTT
CTGGGGGACGCTGCCTACGGTGTTCGGATGACTGCTATGGGTAGTAGCCCAATATAGCTAGCAGTGG
GGTTGCTAGTGACACCATAGCATTGGAGAGCATCACCTCCCTCCTGTGAGTATGGCATCCACTGTACCT
CACTCCCTTCGTCAGGCGAGAGATAACACAATCATGGATCTGCAGACACAGCTGAAGGAAGTATTAAGAG
AAAATGATCTCTTGCGAAGGATGTGGAAGTAAAGGAGAGCAAATGAGTTCTTCAATGAATAGCATCAA
GACCTTCTGGAGCCCAGAGCTGAAGAAGGAACGAGCCCTGAGAAAAGATGAAGCTTCCAAAATCACCATT
TGAAGGAACAGTACAGAGTTGTACAGGAGGAAAACAGCACATGCAGATGACAAATCCAGGCTCTCCAGG
ATGAATTGCGGATCCAGAGGGACCTGAATCAGCTGTTTCAGCAGGATAGTAGCAGCAGGACTGGCGAACC
TTGTGTAGCAGAGCTGACAGAGGAGAATTTTCAGAGGCTTCATGCTGAGCATGAGCGGCAGGCCAAAAGAG
CTGTTTCTTTCGAAAGACATTTGGAGGAAATGGAGCTGCGTATTGAGACTCAAAGCAGACCCCTAAATG
CTCGGGATGAATCCATTAAAGAGCTTCTGGAAATGTTGCAGAGCAAAGGACTTTCTGCCAAGGCTACCGA
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GAGCAGAAGGAAAAAGAGAACAGTATGTTGAGAGAGGAGATGCATCGAAGGTTTGAGAATGCTCCTGATT
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GATTGGCCAGGTGAAACAGGAGCTGTCCAGAAAGGACACAGAACTACTCGCCCTGCAGACAAAGCTAGAA



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A C A C T C A C A A A C C A G T T C T C A G A T A G T A A A C A G C A C A T T G A A G T G T T G A A G G A G T C C T T G A C T G C T A A G G
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 A C T A G A A T C C A T G A A A G C A A A G C T G T C C T C C A C C C A G C A G T C T C T G G C A G A A A A G G A A A C T C A C T T G A C T
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 T G G A C A C C T G A C A A C C C T C T G C C A T G A C C G A G A C C C C T G A T C C C T G G A C T C A C T C C A C C A G G T T C C
 T A T A A C T T G G A C G A T G A C C A G G C G G C T T G G G A G A A T G A G C T G C A G A A G A T G A C C C G G G G C A G C T T C A G G
 A T G A G T T A G A G A A A G G T G A A C G G G A C A A T G C A G A A C T G C A G G A G T T T G C C A A C G C C A T T C T C A G C A G A T
 A G C A G A C C A T T G T C C C G A C A T C C T A G A G C A A G T G G T C A A C G C C C T G G A A G A G T C C T C T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213864 representing NM_178040
Red=Cloning site Green=Tags(s)

M Y G S A R S V G K V E P S S Q S P G R S P R L P R S P R L G H R R T N S T G G S S G S S V G G G S G K T L S M E N I Q S L N A A Y A T S G
 P M Y L S D H E N V G S E T P K S T M T L G R S G G R L P Y G V R M T A M G S S P N I A S S G V A S D T I A F G E H H L P P V S M A S T V P
 H S L R Q A R D N T I M D L Q T L K E V L R E N D L L R K D V E V K E S K L S S S M N S I K T F W S P E L K K E R A L R K D E A S K I T I
 W K E Q Y R V V Q E E N Q H M Q M T I Q A L Q D E L R I Q R D L N Q L F Q Q D S S S R T G E P C V A E L T E E N F Q R L H A E H E R Q A K E
 L F L L R K T L E E M E L R I E T Q K Q T L N A R D E S I K K L L E M L Q S K G L S A K A T E E D H E R T R R L A E A E M H V H H L E S L L
 E Q K E K E N S M L R E E M H R F E N A P D S A K T K A L Q T V I E M K D S K I S S M E R G L R D L E E E I Q M L K S N G A L S T E E R E
 E E M K Q M E V Y R S H S K F M K N K V E Q L K E E L S S K E A Q W E E L K K K A A G L Q A E I G V K Q E L S R K D T E L L A L Q T K L E
 T L T N Q F S D S K Q H I E V L K E S L T A K E Q R A A I L Q T E V D A L R L R L E E K E T M L N K K T K Q I Q D M A E E K G T Q A G E I H
 D L K D M L D V K E R K V N V L Q K K I E N L Q E Q L R D K E K Q M S S L K E R V K S L Q A D T T N T D T A L T T L E E A L A E K E R T I E
 R L K E Q R D R D E R E K Q E E I D N Y K K D L K D L K E K V S L L Q G D L S E K E A S L L D L K E H A S S L A S S G L K K D S R L K T L E
 I A L E Q K K E E C L K M E S Q L K K A H E A A L E A R A S P E M S D R I Q H L E R E I T R Y K D E S S K A Q A E V D R L L E I L K E V E N
 E K N D K D K K I A E L E R Q V K D Q N K K V A N L K H K E Q V E K K K S A Q M L E E A R R R E D N L N D S S Q L Q D S L R K K D D R I E
 E L E E A L R E S V Q I T A E R E M V L A Q E E S A R T N A E K Q V E E L L M A M E K V K Q E L E S M K A K L S S T Q Q S L A E K E T H L T
 N L R A E R R K H L E E V L E M K Q E A L L A A I S E K D A N I A L L E L S S K K K T Q E E V A A L K R E K D R L V Q Q L K Q Q T Q N R M
 K L M A D N Y E D D H F K S S H S N Q T N H K P S P D Q I I Q P L L E L D Q N R S K L K L Y I G H L T T L C H D R D P L I L R G L T P P A S
 Y N L D D D Q A A W E N E L Q K M T R G Q L Q D E L E K G E R D N A E L Q E F A N A I L Q Q I A D H C P D I L E Q V V N A L E E S S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4853_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178040

ORF Size: 3348 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_178040.4](#)

RefSeq Size: 6893 bp

RefSeq ORF: 3351 bp

Locus ID: 23085

UniProt ID: [Q8IUD2](#)

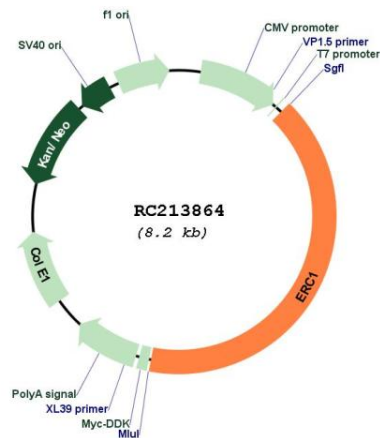
Cytogenetics: 12p13.33

Protein Families: Druggable Genome

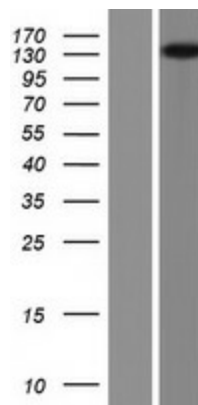
MW: 127.9 kDa

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]

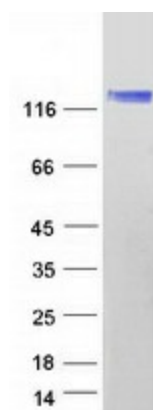
Product images:



Circular map for RC213864



Western blot validation of overexpression lysate (Cat# [LY406029]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213864 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ERC1 protein (Cat# [TP313864]). The protein was produced from HEK293T cells transfected with ERC1 cDNA clone (Cat# RC213864) using MegaTran 2.0 (Cat# [TT210002]).