

Product datasheet for **RC205830**

EFHC1 (NM_018100) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EFHC1 (NM_018100) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EFHC1
Synonyms:	dj304B14.2; EJM1; POC9; RIB72
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC205830 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGC**

ATGGTGTCCAATCCCGTGCATGGCTTGCCTTTCTCCGGGCACGTCCTTTAAGGACTCTACGAAAACAG
 CCTTCCACAGAAGTCAGACGCTGAGCTACAGGAACGGCTATGCAATTGTTGACGCTCCAACAGTTGGGAT
 AGGCGGAGACCGCTCCAGTTCAACCAGCTGTCCAGGCTGAGCTGGATGAGTTGGCCAGTAAGGCACCA
 GTCTTAACTTATGGCCAACCTAAACAAGCCCCACCTGCGGATTTTATTCTGCGCATGTGGCCTTTGACA
 AAAAGGTACTGAAATTTGATGCCTATTTCCAAGAAGATGTTCTATGTCAACTGAGGAACAGTATAGGAT
 CCGTCAGGTGAACATTTACTATTATCTAGAAGATGACAGCATGTCTGTATAGAGCTGTGTAGAAAAT
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 CGTCCCAGTGGATGACTCCTTGTTAAGGAGTTACTCAGGATGTGCTCTCATGGAGAAGGCAAAATTAAC
 TACTATACTTTGTTCTGCTTTCTCAAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205830 protein sequence
 Red=Cloning site Green=Tags(s)

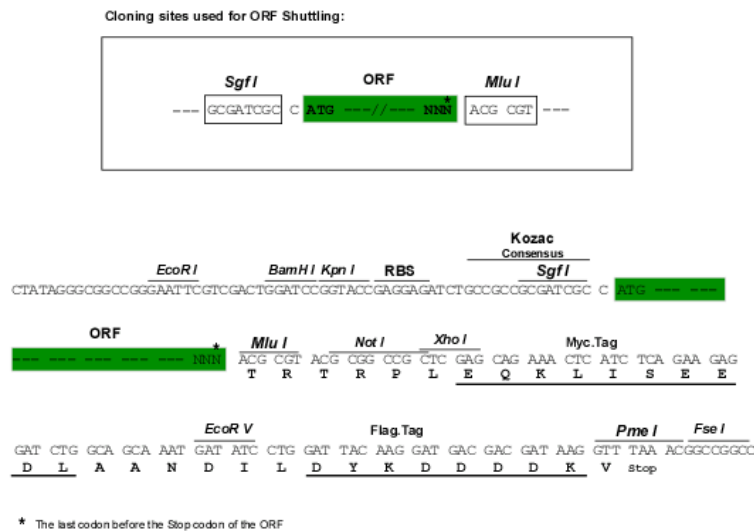
MVSNPVHGLPFLPGTSFKDSTKTAFHRSQTL SYRNGYAI VRRPTVGIGGDRLQFNQLSQAELDELASKAP
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 SGILQGKLIKRLAKNDRGDHYHWKDLNRGINITIYGKTRFVVDQDQFTQVFLESQGIELNPPEKMALD
 PYTELKQPLRKVYVTPSDFDQLKQFLTFDKQVLRFYAIWDDTDSMYGECRTYIIHYLMDDTVEIREVHE
 RNDGIDPFPLLMNRQVRPKVLVENAKNFPQCVLEISDQEVLEWYAKDFIVGKSLTILGRTFFIYDCDPF
 TRRYYKEKFGITDLPRIDVSKREPPVPKQELPPYNGFGLVEDSAQNCFALIPKAPKKDVIKMLVNDNKVL
 RYLAVLESPIPEDKDRRFVFSYFLATDMISIFEPPVRNSGIIGGKYLGRTKVVKPYSTVDNPVYGPSPDF
 FIGAVIEVFGHRFIILDTDEYVLKYMESNAQYSPEALASIQNHVRKREAPAEASKQTEKDPGVQELE
 ALIDTIQKQLKDHCKDNIREAFQIYDKEASGYVDRDMFFKICESLNPVDDSLVKELLRMC SHGEGKIN
 YYNFVRAFSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6574_b11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_018100

ORF Size: 1920 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_018100.4](#)

RefSeq Size: 5596 bp

RefSeq ORF: 1923 bp

Locus ID: 114327

UniProt ID: [Q5JVL4](#)

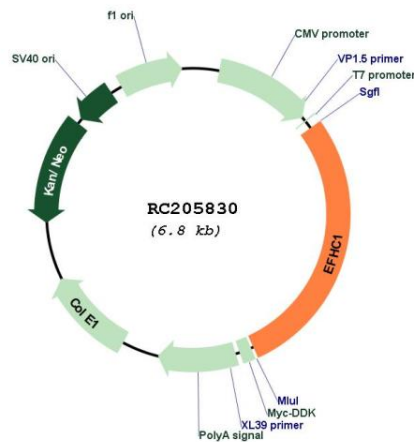
Cytogenetics: 6p12.2

Domains: EFh, DM10

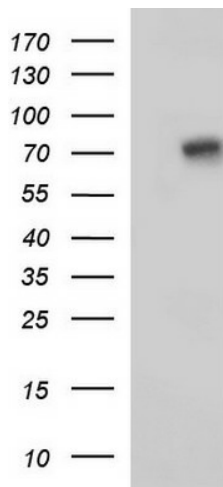
MW: 73.9 kDa

Gene Summary: This gene encodes an EF-hand-containing calcium binding protein. The encoded protein likely plays a role in calcium homeostasis. Mutations in this gene have been associated with susceptibility to juvenile myoclonic epilepsy and juvenile absence epilepsy. Alternatively spliced transcript variants have been described. [provided by RefSeq, Feb 2010]

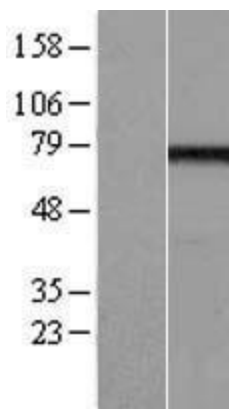
Product images:



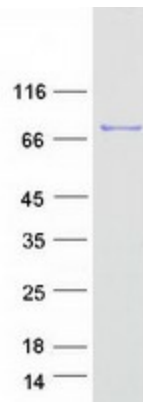
Circular map for RC205830



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EFHC1 (Cat# RC205830, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EFHC1 (Cat# [TA590498]). Positive lysates [LY413316] (100ug) and [LC413316] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413316]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205830 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EFHC1 protein (Cat# [TP305830]). The protein was produced from HEK293T cells transfected with EFHC1 cDNA clone (Cat# RC205830) using MegaTran 2.0 (Cat# [TT210002]).