

Product datasheet for **RC217860**

RAD51C (NM_002876) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RAD51C (NM_002876) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RAD51C
Synonyms: BROVCA3; FANCO; R51H3; RAD51L2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC217860 representing NM_002876
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCGCGGAAGACGTTCCGCTTTGAAATGCAGCGGGATTTGGTGAGTTCCCGCTGTCTCCAGCGGTGC
GGGTGAAGCTGGTGTCTGCGGGTTCCAGACTGCTGAGGAACCTAGAGGTGAAACCTCCGAGCTTAG
CAAAGAAGTTGGGATATCTAAAGCAGAAGCCTTAGAACTCTGCAAAATTCAGAAGAGAATGTCTCACA
AATAAACCAAGATATGCTGGTACATCTGAGTCACACAAGAAGTGTACAGCACTGGAACCTTTGAGCAGG
AGCATACCCAGGGCTTCATAATCACCTTCTGTTTCAGCACTAGATGATATTCTTGGGGTGGAGTGCCTT
AATGAAAACAACAGAAATTTGTGGTGCACCAGGTGTTGGAAAAACACAATTATGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217860 representing NM_002876
Red=Cloning site Green=Tags(s)
MRGKTRFRFEMQRDLVSFPLSPAVRVKLVSAAGFQAEELLEVPSELKVEVGIKAELETLQIIRRECLT
NKPRYAGTSESHKCTALELLEQEHTQGFIIITFCSALDDILGGVPLMKTTEICGAPGVGKTLW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6490_g03.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_002876

ORF Size: 405 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_002876.3](#)

RefSeq Size: 607 bp

RefSeq ORF: 408 bp

Locus ID: 5889

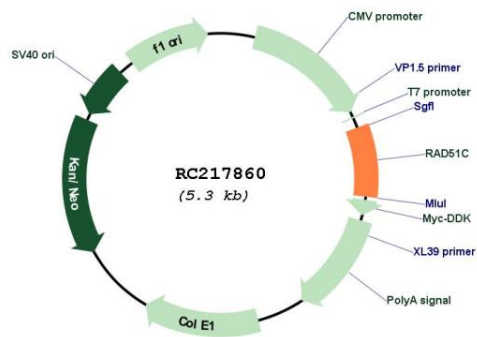
UniProt ID: [O43502](#)

Cytogenetics: 17q22
Protein Families: Druggable Genome
Protein Pathways: Homologous recombination

MW: 14.7 kDa

Gene Summary: This gene is a member of the RAD51 family. RAD51 family members are highly similar to bacterial RecA and *Saccharomyces cerevisiae* Rad51 and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with other RAD51 paralogs and is reported to be important for Holliday junction resolution. Mutations in this gene are associated with Fanconi anemia-like syndrome. This gene is one of four localized to a region of chromosome 17q23 where amplification occurs frequently in breast tumors. Overexpression of the four genes during amplification has been observed and suggests a possible role in tumor progression. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC217860