

Product datasheet for **SC109703**

RAD51C (NM_058216) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD51C (NM_058216) Human Untagged Clone
Tag:	Tag Free
Symbol:	RAD51C
Synonyms:	BROVCA3; FANCO; R51H3; RAD51L2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109703 sequence for NM_058216 edited (data generated by NextGen Sequencing)

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ATGCGCGGAAGACGTTCCGCTTTGAAATGCAGCGGGATTTGGTGTGAGTTCCCGCTGTCT
CCAGCGGTGCGGGTGAAGCTGGTGTCTGCGGGTTCCAGACTGCTGAGGAACTCCTAGAG
GTGAAACCTCCGAGCTTAGCAAAGAAGTTGGGATATCTAAAGCAGAAGCCTTAGAACT
CTGCAAATTATCAGAAGAGAATGTCTCACAATAAACCAAGATATGCTGGTACATCTGAG
TCACACAAGAAGGTACAGCACTGGAACCTTTGAGCAGGAGCATACCCAGGGCTTCATA
ATCACCTTCTGTTTCAGCACTAGATGATATTCTTGGGGTGGAGTGCCTTAATGAAAACA
ACAGAAATTTGGTGCACCAGGTGTTGGAAAAACACAATTATGTATGCAGTTGGCAGTA
GATGTGCAGATACCAGAATGTTTTGGAGGAGTGGCAGGTGAAGCAGTTTTTATTGATACA
GAGGGAAGTTTTATGGTTGATAGAGTGGTACCTTGCTACTGCCTGCATTTCAGCACCTT
CAGCTTATAGCAGAAAAACACAAGGGAGAGGAACACCGAAAAGCTTTGGAGGATTTCACT
CTTGATAATATCTTTCTCATATTTATTTTTCGCTGTGCTGACTACACAGAGTTACTG
GCACAAGTTTATCTTCTCCAGATTTCTTTTCAGAACACTCAAAGTTCCGACTAGTGATA
GTGGATGGTATTGCTTTTCCATTTGTCATGACCTAGATGACCTGTCTTTCGACTCGG
TTATTAATGGCCTAGCCAGCAAATGATCAGCCTTGCAAATAATCACAGATTAGCTGTA
ATTTAAACCAATCAGATGACAACAAGATTGATAGAAATCAGGCCTTGCTTGTTCCTGCA
TTAGGGGAAAGTTGGGGACATGCTGCTACAATACGGCTAATCTTTCATTGGGACCGAAAG
CAAAGTTGGCAACATTGTACAAGTCAACCCAGCCAGAAGGAATGCACAGTACTGTTTCAA
ATCAAACCTCAGGATTTAGAGATACTGTTGTTACTTCTGCATGTTTATTGCAAACAGAA
GGTTCCTTGAGCACCCGAAACGGTCACGAGACCCAGAGGAAGAATTATAA

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Clone variation with respect to NM_058216.1



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_058216 unedited NGGGTCAAATTTGTATACGACTCCTATAGGCGGCCGNAATTCGCACGAGGCAGCGAGG GCGTGCGGAGTTTGGCTGCTCCGGGTTAGCAGGTGAGCCTGCGATGCGCGGGAAGACGT TCCGCTTTGAAATGCAGCGGGATTTGGTGAGTTTCCCGCTGTCTCCAGCGGTGCGGGTGA AGCTGGTGTCTGCGGGTTCCAGACTGCTGAGGAACTCCTAGAGGTGAAACCTCCGAGC TTAGCAAAGAAGTTGGGATATCTAAAGCAGAAGCCTTAGAAACTCTGCAAATTATCAGAA GAGAATGTCTCACAAATAAACCAAGATATGCTGGTACATCTGAGTCACACAAGAAGTGTA CAGCACTGGAACCTTTGAGCAGGAGCATACCCAGGGCTTCATAATCACCTTCTGTTCAG CACTAGATGATATTCTTGGGGTGGAGTGCCCTTAATGAAAACAACAGAAATTTGTGGTG CACCAGGTGTTGGAAAAACAATTATGTATGCAGTTGGCAGTAGATGTGCAGATACCAG AATGTTTTGGAGGAGTGGCAGGTGAAGCAGTTTTTATTGATACAGAGGGAAGTTTTATGG TTGATAGAGTGGTAGACCTTGCTACTGCCTGCATTAGCAGCCTTCAGCTTATAGCAGAAA AACACAAGGGAGAGGAACACCGAAAAGCTTTGGAGGATTTCACTTTGATAATATTTCTTT CTCATATTTATTTTCGCTGCTGCTGACTACACAGGTTACTGGCACAAGTTTATCTTC TTCCAGATTTCTTTCAGAACACTCAAAGTTCGACTAGTGATAGTGGATGGTATTGCTT TTCCATTTGCTCATGACCTAGATGACCTGTCTCTTCGACTCGNTT
Restriction Sites:	NotI-NotI
ACCN:	NM_058216
Insert Size:	2680 bp
OTI Disclaimer:	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).
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:	<ol style="list-style-type: none"> 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_058216.1 , NP_478123.1
RefSeq Size:	1295 bp
RefSeq ORF:	1131 bp
Locus ID:	5889
UniProt ID:	O43502
Cytogenetics:	17q22
Protein Families:	Druggable Genome
Protein Pathways:	Homologous recombination

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]

Transcript Variant: This variant (1) is the longest transcript and encodes the longer isoform (1).