

## Product datasheet for **SC109708**

### **RAD51D (NM\_133629) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RAD51D (NM_133629) Human Untagged Clone
Tag:	Tag Free
Symbol:	RAD51D
Synonyms:	BROVCA4; R51H3; RAD51L3; TRAD
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_133629, the custom clone sequence may differ by one or more nucleotides

```
ATGGGCGTGCTCAGGGTCGGACTGTGCCCTGGCCTTACCGAGGAGATGATCCAGCTTCTCAGGAGCCACA
GGATCAAGACAGTGGTGGACCTGGTTTCTGCAGACCTGGAAGAGGTAGCTCAGAAATGTGGCTTGTCTTA
CAAGGCAGAAGCTCTCCGGAGGATCCAGGTGGTGCATGCATTTGACATCTCCAGATGCTGGATGTGCTG
CAGGAGCTCCGAGGCACTGTGGCCAGCAGGTGACTGTTCTTCAGGAACTGTGAAGGTGGTGGTTGTGG
ACTCGGTCACTGCGGTGGTTTCCCCACTTCTGGGAGGTCAGCAGAGGGAAGGCTTGGCCTTGATGATGCA
GCTGGCCCGAGAGCTGAAGACCCTGGCCCGGGACCTTGGCATGGCAGTGGTGGTACCAACCACATAACT
CGAGACAGGGACAGCGGGAGGCTCAAACCTGCCCTCGGACGCTCCTGGAGCTTTGTGCCAGCACTCGGA
TTCTCCTGGACACCATCGAGGGAGCAGGAGCATCAGGCGCCGGCGCATGGCGTGTCTGGCCAAATCTTC
CCGACAGCCAACAGGTTTCCAGGAGATGGTAGACATTGGGACCTGGGGGACCTCAGAGCAGAGTGCCACA
TTACAGGGTGATCAGACATGA
```



[View online »](#)

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_133629 unedited AATTGTACCCCGCCCGTTGNCGCAAAGGGCGGTAGGCGGTACGGTGGGAGGTCTATAT AAGCAGAGCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCC GCGAATTGCGGCACGAGGGCGGGCGGGCTCTGGGCGCGGAATCCCGGCGGATCCCGGGCG GGCGGATGACCCCGAGCCCTACCCTTGGTGCCGCTCCTCCTCTCCTTTCTCCTCCG CAGCCAGCGCGCCTGTGTCTCTCTAGGAAGGGTAGGGGAGGGCGCTGGAGAGGACC CCCCGCAATGCCACGTGACGTGCAGTCCCCCTGGGGCTGTTCCGGCCTGCGGGGAACA TGGGCGTGCTCAGGGTCGGACTGTGCCCTGGCCTTACCGAGGAGATGATCCAGCTTCTCA GGGCCACAGGATCAAGACAGTGGTGGACCTGGTTTCTGCAGACCTGGAAGAGGTAGCTC AGAAATGTGGCTTGTCTTACAAGGCCCTGGTTGCCCTGAGGCGGGTGTCTGGCTCAGT TCTCGGCTTTCCCGTGAATGGCGCTGATCTCTACGAGGAACTGAAGACCTCTACTGCCA TCCTGTCCACTGGCATTGGCAGTCTTGATAAACTGCTTGATGCTGGTCTCTATACTGGAG AAGTGACTGAAATTGTAGGAGGCCAGGTAACGGCAAACTCAGGTATGTCTGTATGG CAGCAAATGTGGCCCATGGCCTGCAGCAAACGCTCTATATGTAGATTCCAATGGAGGGC TGACAGCTTCCCGCTCCTCCAGCTGCTTCNAGCTAAAACCCAGATGAGGAGGAAACAG GCAGAGCTCTCCGGGAGATCCCAGTGGTGCATGCATTTGACATCTCCAGATGCTGGATG TGCTGCNAGAGCTCCGAG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_133629
<b>Insert Size:</b>	2650 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>	<u><a href="#">NM_133629.1</a></u> , <u><a href="#">NP_598332.1</a></u>
<b>RefSeq Size:</b>	1477 bp
<b>RefSeq ORF:</b>	651 bp
<b>Locus ID:</b>	5892
<b>UniProt ID:</b>	<u><a href="#">O75771</a></u>
<b>Cytogenetics:</b>	17q12
<b>Domains:</b>	ENDO3c
<b>Protein Families:</b>	Druggable Genome

**Protein Pathways:** Homologous recombination

**Gene Summary:** The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and *Saccharomyces cerevisiae* Rad51, which are known to be involved in the homologous recombination and repair of DNA. This protein forms a complex with several other members of the RAD51 family, including RAD51L1, RAD51L2, and XRCC2. The protein complex formed with this protein has been shown to catalyze homologous pairing between single- and double-stranded DNA, and is thought to play a role in the early stage of recombinational repair of DNA. Alternative splicing results in multiple transcript variants. Read-through transcription also exists between this gene and the downstream ring finger and FYVE-like domain containing 1 (RFFL) gene. [provided by RefSeq, Jan 2011]

Transcript Variant: This variant (4, also known as TRAD-d3) lacks three alternate exons which results in the loss of an in-frame segment in the central coding region, compared to variant 1. The encoded isoform (4) is shorter than isoform 1.