

## Product datasheet for RC211735

### XRCC3 (NM\_001100118) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | XRCC3 (NM_001100118) Human Tagged ORF Clone                       |
| Tag:                      | Myc-DDK   |
| Symbol:                   | XRCC3   |
| Synonyms:                 | CMM6  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| ORF Nucleotide Sequence:  | >RC211735 ORF sequence<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATTTGGATCTACTGGACCTGAATCCAGAATTATTGCTGCAATTAAGAAAGCCAACTGAAATCGG  
TAAAGGAGGTTTTACACTTTTCTGGACCAGACTGAAGAGACTGACCAACCTCTCCAGCCCCGAGGTCTG  
GCACTTGCTGAGAACGGCCTCCTTACACTTGC GGGAAGCAGCATCCTTACAGCACTGCAGCTGCACCAG  
CAGAAGGAGCGGTTCCCCACGCAGCACCAGCGCCTGAGCCTGGGCTGCCCGGTGCTGGACGCGTCTGCC  
GCGGTGGCCTGCCCTGGACGGCATCACTGAGCTGGCCGGACGCAGCTCGGCAGGAAGACCCAGCTGGC  
GCTGCAGCTCTGCCTGGCTGTGCAGTTCGCGCGGACGCAGCAGGAGGCTGGAGGCTGGAGCCGTCTACATC  
TGCACGGAAGACGCCTTCCCGCACAAAGCGCTGCAGCAGCTCATGGCCCAGCAGCCGCGGTGCGCACTG  
ACGTTCCAGGAGAGCTGCTTCAAGACTCCGATTTGGCAGCCAGATCTTCATCGAGCACGTGGCCGATGT  
GGACACCTTGTGGAGTGTGAATAAGAAGGTCCCCGTACTGTCTCGGGCATGGCTCGCCTGGTG  
GTCATCGACTCGGTGGCAGCCCCATTCCGCTGTGAATTTGACAGCCAGGCTCCGCCCCAGGGCCAGGC  
ATCTGCAGTCCCTGGGGCCATGCTGCGTGAGCTGAGCAGTGCCTTCCAGAGCCCTGTGCTGTGCATCAA  
CCAGGTGACAGAGGCCATGGAGGAGCAGGGCGCAGCACACGGGCCGCTGGGTTCTGGGACGAACGTGTT  
TCCCCAGCCCTTGGCATAACCTGGGCTAACAGCTCCTGGTGAGACTGCTGGCTGACCCGCTCCGCGAGG  
AAGAGGCTGCCCTCGGCTGCCAGCCCGGACCCTGCGGGTGTCTCTGCCCCACCTGCCCCCTCCTCCTC  
CTGTTCTACACGATCAGTGCCGAAGGGGTGCGAGGGACACCTGGGACCCAGTCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC211735 protein sequence  
Red=Cloning site Green=Tags(s)

MDLDDLNLNPRIAAIKKAKLKSVEVLHFSGPDLKRLTNLSSPEVWHLRLTASLHLRGSSILTALQLHQ  
 QKERFPTQHQRLSLGCPVLDALLRGGLPLDGITELAGRSSAGKTQALQLCLAVQFPRQHGGLEAGAVYI  
 CTEDAFPHKRLQQLMAQQPRLRTDVPCELLQKLRFGSQIFIEHVADVDTLLECVNKKVPVLLSRGMARLV  
 VIDSVAAPFRCEFDSDASAPRARHLQSLGAMRELSSAFQSPVLCINQVTEAMEEQGAAHGPLGFWDERV  
 SPALGITWANQLLVRLADRLREEEAALGCPARTLRVLSAPHLPPSSCSYTI SAEGVGRGTPGTQSH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6175\\_e02.zip](https://cdn.origene.com/chromatograms/mk6175_e02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001100118

**ORF Size:** 1038 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\\_001100118.1](#), [NP\\_001093588.1](#)

**RefSeq Size:** 2563 bp

**RefSeq ORF:** 1041 bp

**Locus ID:** 7517

**UniProt ID:** [O43542](#)

**Cytogenetics:** 14q32.33

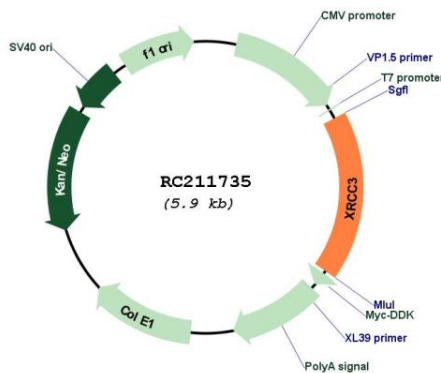
**Protein Families:** Druggable Genome

**Protein Pathways:** Homologous recombination

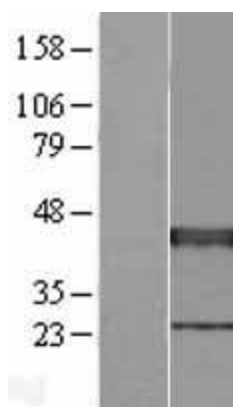
**MW:** 37.9 kDa

**Gene Summary:** This gene encodes a member of the RecA/Rad51-related protein family that participates in homologous recombination to maintain chromosome stability and repair DNA damage. This gene functionally complements Chinese hamster irs1SF, a repair-deficient mutant that exhibits hypersensitivity to a number of different DNA-damaging agents and is chromosomally unstable. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC211735



Western blot validation of overexpression lysate (Cat# [LY420224]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC214791] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).