

## Product datasheet for **RC200326**

### **XRCC3 (NM\_005432) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	XRCC3 (NM_005432) 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:	>RC200326 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATTTGGATCTACTGGACCTGAATCCCAGAATTATTGCTGCAATTAAGAAAGCCAACTGAAATCGG  
TAAAGGAGGTTTTACACTTTTCTGGACCAGACTTGAAGAGACTGACCAACCTCTCCAGCCCCGAGGTCTG  
GCACTTGCTGAGAACGGCCTCCTTACACTTGC GGGAAGCAGCATCCTTACAGCACTGCAGCTGCACCAG  
CAGAAGGAGCGGTTCCCCACGCAGCACCAGCGCCTGAGCCTGGGCTGCCGGTGTGGACGCGCTGCTCC  
GCGGTGGCCTGCCCTGGACGGCATCACTGAGCTGGCCGGACGCAGCTCGGCAGGAAGACCCAGCTGGC  
GCTGCAGCTCTGCCTGGCTGTGCAGTTCGCGCGGACGCAGCAGGAGGCTGGAGGCTGGAGCCGTCTACATC  
TGCACGGAAGACGCTTCCCCGACAAGCGCTGCAGCAGCTCATGGCCCAGCAGCCGCGGTGCGCACTG  
ACGTTCCAGGAGAGCTGCTTCAGAAGCTCCGATTTGGCAGCCAGATCTTCATCGAGCACGTGGCCGATGT  
GGACACCTTGTGGAGTGTGTAATAAGAAGGTCCCCGTACTGCTGTCTCGGGCATGGCTCGCCTGGTG  
GTCATCGACTCGGTGGCAGCCCCATTCCGCTGTGAATTTGACAGCCAGGCTCCGCCCCAGGGCCAGGC  
ATCTGCAGTCCCTGGGGCCACGCTGCGTGAGCTGAGCAGTGCCTTCCAGAGCCCTGTGCTGTGCATCAA  
CCAGGTGACAGAGGCCATGGAGGAGCAGGGCCAGCACACGGGCCGCTGGGTTCTGGGACGAACGTGTT  
TCCCCAGCCCTTGGCATAACCTGGGCTAACAGCTCCTGGTGAGACTGCTGGCTGACCCGGCTCCGCGAGG  
AAGAGGCTGCCCTCGGCTGCCAGCCCGACCCTGCGGGTGTCTCTGCCCCACCTGCCCCCTCCTCCTC  
CTGTTCTACACGATCAGTGCCGAAGGGTGCAGGGACACCTGGGACCCAGTCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200326 protein sequence  
Red=Cloning site Green=Tags(s)

MDLDDLNPRIAAIKKAKLKSVEVLHFSGPDLKRLTNLSSPEVWHLRLTASLHLRGSSILTALQLHQ  
 QKERFPTQHQLSLGCPVLDALLRGGLPLDGITELAGRSSAGKTQALQLCLAVQFPRQHGGLEAGAVYI  
 CTEDAFPHKRLQQLMAQQPRLRTDVPGELLQKLRFGSQIFIEHVADVDTLLECVNKKVPVLLSRGMARLV  
 VIDSVAAPFRCEFDSDQASAPRARHLQSLGATLRELSAFQSPVLCINQVTEAMEEQGAAHGPLGFWDERV  
 SPALGITWANQLLVRLADRLREEEAALGCPARTLRVLSAPHLPPSSCSYTI SAEGVRGTPGTQSH

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\_005432

**ORF Size:** 1038 bp

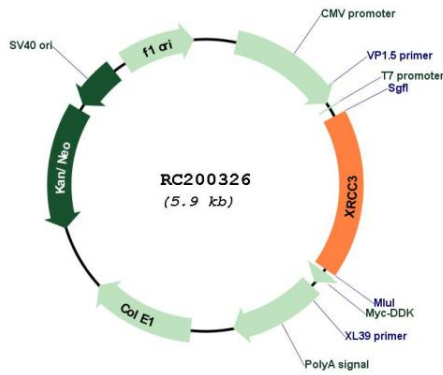
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

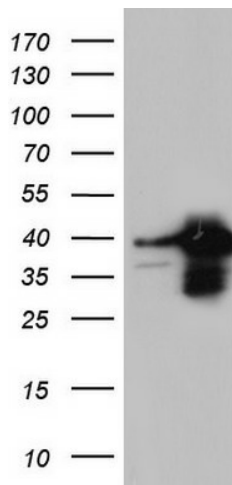
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_005432.4</a>
<b>RefSeq Size:</b>	2620 bp
<b>RefSeq ORF:</b>	1041 bp
<b>Locus ID:</b>	7517
<b>UniProt ID:</b>	<a href="#">O43542</a>
<b>Cytogenetics:</b>	14q32.33
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Homologous recombination
<b>MW:</b>	37.8 kDa
<b>Gene Summary:</b>	<p>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]</p>

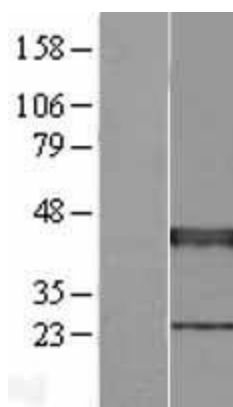
Product images:



Circular map for RC200326



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY XRCC3 (Cat# RC200326, 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-XRCC3 (Cat# [TA804755]). Positive lysates [LY401663] (100ug) and [LC401663] (20ug) can be purchased separately from OriGene.



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]).