

Product datasheet for **RG208330**

XRCC2 (NM_005431) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XRCC2 (NM_005431) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	XRCC2
Synonyms:	FANCU; POF17; SPGF50
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208330 representing NM_005431 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGTAGTGCCTTCCATAGGGCTGAGTCTGGGACCGAGCTCCTTGCCCGACTTGAAGGTAGAAGTTCCT
TGAAAGAAATAGAACCAATCTGTTTGCTGATGAAGATTCACCTGTGCATGGTGATATTCTTGAATTTCA
TGGCCCAGAAGGAACAGGAAAAACAGAAATGCTTTATCACCTAACAGCACGATGTATACTCCCAAATCA
GAAGGTGGCCTGGAAGTAGAAGTCTTATTTATTGATACAGATTACCACTTTGATATGCTCCGGCTAGTTA
CAATTCTTGAGCACAGACTATCCCAAAGCTCTGAAGAAATAATCAAATACTGCCTGGGAAGATTTTTTTT
GGTGTACTGCAGTAGTAGCACCCACTTACTTCTTACACTTTACTCACTAGAAAGTATGTTTTGTAGTCAC
CCATCTCTCTGCCTTTTGATTTTGGATAGCCTGTGAGCTTTTACTGGATAGACCGCTCAATGGAGGAG
AAAGTGTGAACCTACAGGAGTCTACTCTGAGGAAATGTTCTCAGTGCTTAGAGAAGCTTGTAAATGACTA
TCGCCTGGTCTTTTTGCAACGACACAACTATAATGCAGAAAGCCTCGAGCTCATCAGAAGAACCTTCT
CATGCCTCTCGACGACTGTGTGATGTGGACATAGACTACAGACCTTATCTCTGTAAGGCATGGCAGCAAC
TGGTGAAGCACAGGATGTTTTCTCAAACAAGATGATTCTCAAAGCAGCAACCAATTTTCATTAGTTTC
ACGTTGTTAAAAAGTAACAGTTAAAAAACATTTTTTATTATTGGAGAAAGTGGGGTTGAATTTTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208330 representing NM_005431
 Red=Cloning site Green=Tags(s)

MCSAFHRAESGTELLARLEGRSSLKEIEPNLFADEDSPVHGDILEFHGPEGTGKTEMLYHLTARCILPKS
 EGGLEVEVLFIDTDYHFDMLRLVTILEHRLSQSSEI I KYCLGRFFLVYCSSTHLLLTLYSLESMFCSH
 PSLCLLILDLSAFYWIDRVNGGESVNLQESTLRKCSQCLEKLVNDYRLVLFATTQTIMQKASSSSEEPS
 HASRRLCDVDIDYRPLYCKAWQQLVKHRMFFSKQDDSQSSNQFSLVSRCLKSNLKKHFFIIGESGVEFC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005431

ORF Size: 840 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_005431.2](#)

RefSeq Size: 3094 bp

RefSeq ORF: 843 bp

Locus ID: 7516

UniProt ID: [O43543](#)

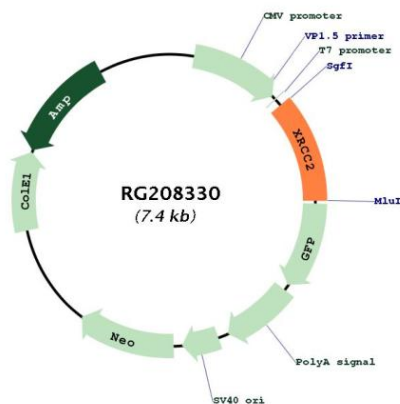
Cytogenetics: 7q36.1

Protein Families: Druggable Genome

Protein Pathways: Homologous recombination

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 is involved in the repair of DNA double-strand breaks by homologous recombination and it functionally complements Chinese hamster *irs1*, a repair-deficient mutant that exhibits hypersensitivity to a number of different DNA-damaging agents. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208330