

Product datasheet for **MG204755**

Xrcc4 (NM_028012) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Xrcc4 (NM_028012) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Xrcc4
Synonyms: 2310057B22Rik; AW413319; AW545101
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG204755 representing NM_028012
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAAGGAAAGTAAGCAGAATCTACCTTGCTTCTGAACCAACGTACCTTATTTTCTGCAAGTGTCTT
 GGGAGAGAGCAATAGGATCCGGCTTTGTTATTACACTTACTGACGGCCATTCAGCCTGGACTGCAACAGT
 TTCTGAATTGGAGATTTCCAAGAAGCTGATGACATGGCTATGGAGAAAGGAAAATACATTGATGAGCTG
 AGAAAGGCACTGGTGCCAGGGTCAGGAGCAGCTGGTACATACAAGTTCCTTTTTCTAAGGAGTCTCAGC
 ATTTCTCCCTTGAGAAAGAACTGAAAGATGTTTCATTGACTGGTTCCTTCAACCTAGACAAAGTTTC
 AAAGTCCAGCTGAAGTCATAAGAGAACTCAATTTGTTACTGCCTGGACACCATTACAGAAAAGCAAGCCAAA
 AACGAGCACCTGCAGAAAAGAAAATGAAAGGCTCCTGAGAGACTGGAATGATGTTCAAGGCCGATTGAGA
 AATGTGTGAGTGCCAAAGAAGCCTTGGAGGCTGATTTGTATCAAAGATTTATCTTGGTGCTGAATGAGAA
 GAAAACAAAGATCCGGAGCTTGCAATAAATTGCTAAATGAAGTCCAGCAGCTGGAGGAGAGTACCAAACCT
 GAAAGGGAAAAATCCGTGTTCTGACAAAACACCTGAGGAGCATGGGCTTTATGATGGAAGCACCGATGAAG
 AAAGTGGAGCCCCTGTGCAGGCTGCAGAACTCTCATAAGGATGATTCCATATTTCAAGTCCGGATGT
 CACTGACATTGCACCAAGTAGGAAGAGGAGACACCGAATGCAGAAGAATCTTGGACAGAACCTAAAATG
 GCTCCACAGGAGTTGCCGCTACAGGAGAAGGAAAGGCTTGCCCTTCACTACCCAGACCTGAAAGAGG
 AGAGCACCTCTGCTGAAAACATGCTTTAGAAAACCTGAGAAACAGCAGCCAGAAAGATCTCTTTGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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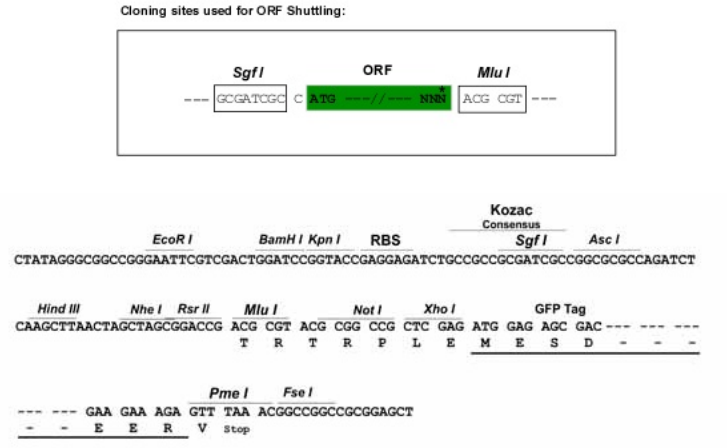
Protein Sequence: >MG204755 representing NM_028012
Red=Cloning site Green=Tags(s)

MERKVSRIYLASEPNVPYFLQVSWERAIGSGFVITLTDGHSAWTATVSELEISQEADDMAMEKGYIDEL
 RKALVPGSGAAGTYKFLFSKESQHFSLKELKDVSRFLGDFNLKVSNSAEVIRELICCYCLDITEKQAK
 NEHLQKENERLLRDWNDVQGRFEKCVSAKEALEADLYQRFILVLNEKTKIRSLHKLLNEVQQLLEESTKP
 ERENPCSDKTPEEHGLYDGSTDEESGAPVQAAETLHKDDSISSPDVTDIAPSRKRRHRMQKNLGTPEKM
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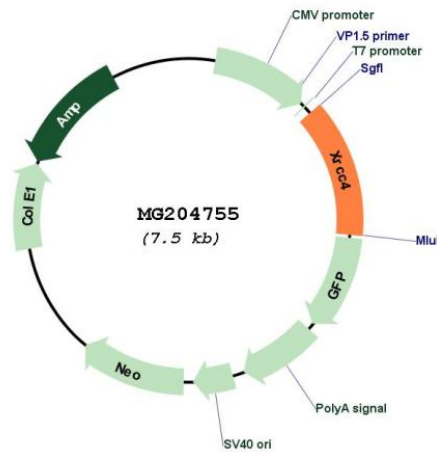
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_028012

ORF Size: 978 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:	<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_028012.1 , NP_082288.1
RefSeq Size:	1457 bp
RefSeq ORF:	981 bp
Locus ID:	108138
UniProt ID:	Q924T3
Cytogenetics:	13 C3
Gene Summary:	Involved in DNA nonhomologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. Binds to DNA and to DNA ligase IV (LIG4). The LIG4-XRCC4 complex is responsible for the NHEJ ligation step, and XRCC4 enhances the joining activity of LIG4. Binding of the LIG4-XRCC4 complex to DNA ends is dependent on the assembly of the DNA-dependent protein kinase complex DNA-PK to these DNA ends (By similarity). [UniProtKB/Swiss-Prot Function]