

Product datasheet for **SC324607**

XRCC4 (NM_022406) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XRCC4 (NM_022406) Human Untagged Clone
Tag:	Tag Free
Symbol:	XRCC4
Synonyms:	SSMED
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_022406.1
 GGGGACCGGAAGTAGAGTCACGGAGAGGTAGGATCCGGAAGTGGGGCTGCCTCTTTAAAT
 AACAAAAATCTGAGGTATTAAGAAATGGAGAGAAAAAATAGCAGAATCCACCTTGTTTCT
 GAACCCAGTATAACTCATTCTACAAGTATCTTGGGAGAAAACACTGGAATCTGGTTTT
 GTTATTACACTTACTGATGGTCATTGAGCATGGACTGGGACAGTTTCTGAATCAGAGATT
 TCCCAAGAAGCTGATGACATGGCAATGGAAAAAGGAAATATGTTGGTGAAGTGAAGAAA
 GCATTGTTGTCAGGAGCAGGACCAGCTGATGTATACACGTTTAAATTTTTCTAAAGAGTCT
 TGTATTTCTTTGAGAAAAACCTGAAAGATGTCTCATTGAGACTTGGTTCCTTCAAC
 CTAGAGAAAGTTGAAAACCCAGCTGAAAGTCATTAGAGAACTTATTTGTTATTGCTTGGAC
 ACCATTGCAGAAAATCAAGCCAAAAATGAGCACCTGCAGAAAAGAAAATGAAAGGCTTCTG
 AGAGATTGGAATGATGTTCAAGGACGATTTGAAAAATGTGTGAGTGCTAAGGAAGCTTTG
 GAGACTGATCTTTATAAGCGTTTATTCTGGTGTGAATGAGAAGAAAACAAAAATCAGA
 AGTTTGCATAATAAATTATTAATGCAGCTCAAGAACGAGAAAAGGACATCAAACAAGAA
 GGGGAAACTGCAATCTGTTCTGAAATGACTGCTGACCGAGATCCAGTCTATGATGAGAGT
 ACTGATGAGGAAAGTAAAACCAAACTGATCTCTCTGGGTGGCTTCAGCTGCTGTAAGT
 AAAGATGATTCCATTATTTCAAGTCTTGATGTCAGTCTGATATTGCACCAAGTAGAAAAAGG
 AGACAGCGAATGCAAAGAAATCTTGGGACAGAACCTAAAATGGCTCCTCAGGAGAATCAG
 CTTCAAGAAAAGGAAAATTTAGGCCTGATTTCTCACTACCTGAGACGTCTAAAAAGGAG
 CACATCTCAGCTGAAAACATGTCTTTAGAACTCTGAGAAACAGCAGCCAGAACGACCTC
 TTTGATGAGATTTAACAGTCTCAAAAAATCTTTGATGTTCACTAGACTATGTTTTCTAT
 TCATTTCTTTAAAATGAAAAAGGAGAATTTCAAGTCAGCAGCCGCTATTACCGTATCTTA
 CAATTTAATTACATACACAGTGAATTTGAAACCATTGTGCAAAATGGATTACACATGTATA
 CAAAGATACGATTTGATGATGACTGGCACATTATTCTAAACTATTCATTGATGATGATG
 TATAATTACATAAATTGATGAGACTTTTTGTTGCAAAAGGACACATTTATCATATTCATT
 CACACATATTATATGTGATAGCTGTCCAACATCCTGTCTGGGAAGATTTTAAAAACAGGA
 CAAAGAAAACATCACTTTAAAATGTCTTCAAGCTTTTTTTGAAATAGACGATTTCAAACATA
 TTCTGAACATTGATGTTTGAACATTTTAAATTTGTGTGATGATGTAGAAAATATAATTTTA
 GTTTGTACATAAACATTGTGAAATCTGATAATAAAATTTTTGATACACTAAAAA
 AAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_022406

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<u>NM_022406.1</u> , <u>NP_071801.1</u>
RefSeq Size:	1665 bp
RefSeq ORF:	1011 bp
Locus ID:	7518
UniProt ID:	<u>Q13426</u>
Cytogenetics:	5q14.2
Protein Families:	Druggable Genome
Protein Pathways:	Non-homologous end-joining
Gene Summary:	<p>The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand breaks. This protein plays a role in both non-homologous end joining and the completion of V(D)J recombination. Mutations in this gene can cause short stature, microcephaly, and endocrine dysfunction (SSMED). Alternate transcript variants such as NM_022406 are unlikely to be expressed in some individuals due to a polymorphism (rs1805377) in the last splice acceptor site. [provided by RefSeq, Oct 2019]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region compared to variant 1. The encoded isoform (2) is longer than isoform 1. Variants 2 and 4 encode the same isoform (2).</p>