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Product datasheet for RC204483

XPC (NM_004628) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XPC (NM_004628) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XPC
Synonyms:	p125; RAD4; XP3; XPCC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204483 representing NM_004628
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCGGAAACGCGCGGCCGGCGGGGAGCCGCGGGGACGCGAACTGCGCAGCCAGAAATCCAAGGCCA
AGAGCAAGGCCCGGCGTGAGGAGGAGGAGGAGGATGCCTTTGAAGATGAGAAACCCCCAAAGAAGAGCCT
TCTCTCCAAAGTTTCACAAGGAAAGAGGAAAAGAGGCTGCAGTCATCCTGGGGGTTCAGCAGATGGTCCA
GCAAAAAAGAAAGTGGCCAAGGTGACTGTTAAATCTGAAAACCTCAAGGTTATAAAGGATGAAGCCCTCA
GCGATGGGGATGACCTCAGGGACTTTCCAAGTGACCTCAAGAAGGCACACCATCTGAAGAGAGGGGCTAC
CATGAATGAAGACAGCAATGAAGAAGAGGAAGAAAGTGAAAATGATTGGGAAGAGGTTGAAGAACTTAGT
GAGCCTGTGCTGGGTGACGTGAGAGAAAGTACAGCCTTCTCTCGATCTCTTCTGCCTGTGAAGCCAGTGG
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ACTACATTGGAAAGGAGATTTGCTATTTACTCTGCTCGAGATGATGAGGAATTGGTCCATATATTCTTAC
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GAAGAAAAGCAGAAGCTGAAGGGTGGGCCCAAGAAGACCAAAAGGGAAAAGAAAGCAGCAGCTTCCCACC
TGTTCCCATTTGAGAAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204483 representing NM_004628
Red=Cloning site Green=Tags(s)

MARKRAAGGEPRGRELRSQKSKAKSKARREEEEEDAFEDEKPPKKSLLSKVSQGKRKRGCSHPGGSADGP
AKKKVAKVTVKSENLKVIKDEALSDGDDLRDFPSDLKKAHHLKRGATMNEDSNEEEEESENDWEEVEELS
EPVLGDVRESTAFSRSLLPVKPVEIEIETPEQAKTRERSEKIKLEFETYLRRAMKRFNKGVHEDTHKVHL
LCLLANGFYRNNICSQPDLHAIGLSIIPARFTRVLPRDVDTYYLSNLVKWFIGTFTVNAELSASEQDNLQ
TTLERRFAIYSARDDEELVHIFLLILRALQLLTRLVLSLQPIPLKSATAKGKKPSKERLTADPGGSSETS
SQVLENHTKPKTSKGTKQEETFAKGTCRPSAKGKRNKGGRKKRSKPSSSEEDEGPGDKQEKATQRRPHGR
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HRKDPSLPAASSSSSSSKRGKKMCSDGEKAEKRSIAGIDQWLEVFCEQEEKWVCVDCVHGVVGQPLTCYK
YATKPMTYVVGIDSDGWVRDVTQRYDPVWMTVTRKCRVDAEWWAETLRPYQSPFMDREKKEDLEFQAKHM
DQPLPTAIGLYKNHPLYALKRHLLKYEAIYPETAAILGYCRGEAVYSRDCVHTLHSRDTWLKKARVVRLG
EVPYKMVKGFSNRARKARLAEPQLREENDLGLFGYWQTEEYQPPVAVDGKVPRNEFGNVYLFLPSMMPIG
CVQLNLPNLHRVARKLDIDCVQAITGFDFHGGYSHPVTDGYIVCEEFKDVLLTAWENEQAVIERKEKEKK
EKRALGNWKLLAKGLLIRERLKRRYGPKSEAAAPHTDAGGGLSSDEEEGTSSQAEAARILAASWPQNRED
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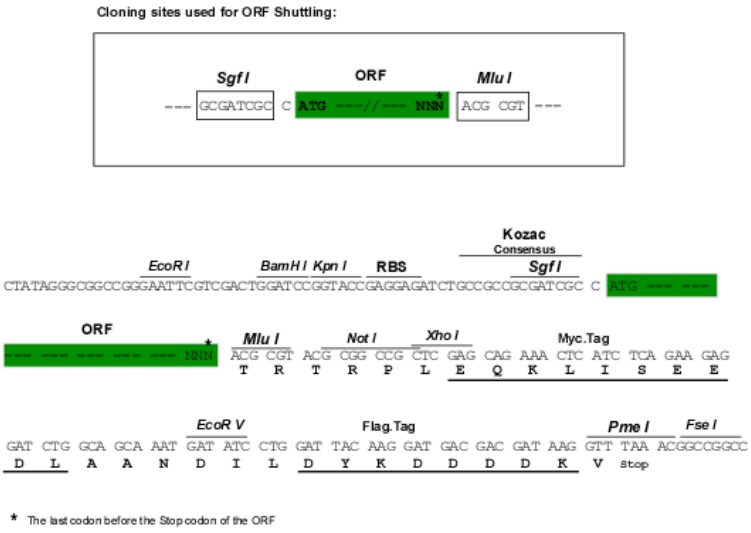
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



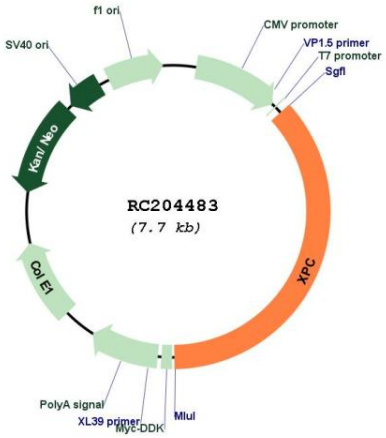
ACCN: NM_004628

ORF Size: 2820 bp

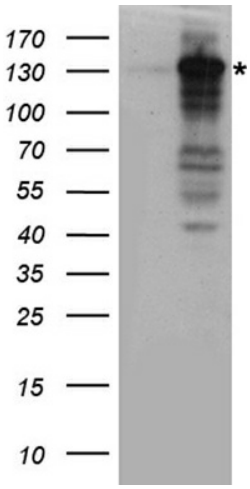
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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_004628.2
RefSeq Size:	3714 bp
RefSeq ORF:	2823 bp
Locus ID:	7508
UniProt ID:	Q01831
Cytogenetics:	3p25.1
Domains:	Rad4
Protein Families:	Druggable Genome
Protein Pathways:	Nucleotide excision repair
MW:	105.8 kDa

Gene Summary: The protein encoded by this gene is a key component of the XPC complex, which plays an important role in the early steps of global genome nucleotide excision repair (NER). The encoded protein is important for damage sensing and DNA binding, and shows a preference for single-stranded DNA. Mutations in this gene or some other NER components can result in Xeroderma pigmentosum, a rare autosomal recessive disorder characterized by increased sensitivity to sunlight with the development of carcinomas at an early age. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RC204483



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY XPC (Cat# RC204483, 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-XPC rabbit polyclonal antibody (Cat# [TA890156]).