

Product datasheet for **MR211103**

Xpc (NM_009531) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Xpc (NM_009531) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Xpc
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>MR211103 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCCCCAAGCGCACCGCAGACGGAAGCGGGCGGAAGCGGGCCAGAAAACCGAGGACAACAAGTAG
 CCCGGCACGAGGAGAGCGTTGCGGATGACTTTGAAGATGAGAAGCAGAAACCCGAAAGGAGAGCTTTT
 CCCGAAAGTCTCTCAAGGAAAGAGGAAGAGGGGCTGCAGTGATCCAGGGACCCACAAATGGTGACGCA
 AAAAAGAAAGTGGCCAAAGCCACTGCTAAATCCAAGAATCTCAAGGTTCTGAAGGAGGAAGCACTCAGCG
 ACGGGGATGACTTCCGGGACTCACCAGCTGACTGCAAGAAGGCAAGAAACCCAAAAAGCAAGGTGGT
 GGACCAAGGCACTGATGAAGATGACAGTGAGGATGACTGGGAGGAGGTGGAAGAGCTTACTGAACCTGTG
 CTGGACATGGGAGAAAATCTGCCACCTCACCGTCTGACATGCCTGTGAAGGCGGTGGAGATTGAAATTG
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 GAGGATGATGAAGCGTTTCAATAAAGAAGTACAGGAGAACATGCACAAGTTTACCTGCTGTGCCTGCTG
 GCCAGTGGCTTCTATCGAAATAGCATCTGCCGACAGCCAGATCTGCTGGCCATTGGCCTCTCCATCATTC
 CAATTCGCTTTACCAAGGTGCCACTTCAAGATAGGGATGCCTACTACCTTCAAACCTGGTAAAGTGGTT
 CATCGAACCTTCACTGTCAACGCTGACCTTTCAGCCAGCGAGCAGGACGACCTGCAGACCACCTTGGAA
 AGGAGGATTGCCATTTACTCTGCGAGGGATAATGAAGAGTTGGTCCATATATTTCTTCTGATTCTTCGGG
 CTCTGCAGCTGCTCACCCGGCTGGTCTTGTCTCTGCAGCCATTCCACTGAAGTCAGCTGTGACAAAAGG
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 GAAAGCCACAACAACCTACGACCAGCAGGAGAATCAAAGAAGAAGAAACCTTGTCTGAGGCGAGAGGCA
 AGCAACCGCCAGGGGGAAGAGAGGCACAGGCACTGCGGGCAGCAGGCAGCGGAGGAAGCCCTTTCGAG
 CGAGGGAGAGGAGGCGGAGCAGAAAGTCCAGGGCCGTCCACATGCCCGGAAGCGGCGTGTGGCTGCCAAG
 GTGTCATACAAAGAGGAGAGTGAGAGCGATGGGGCAGGCAGCGGCTCTGACTTTGAACCGTCCAGTGGG
 AGGGCCAGCATTCTCTGATGAGGATTGTGAGCCTGGCCCTCGCAAGCAGAAGAGGGCCTCAGCTCCTCA
 GAGGACAAAGGCTGGGTCTAAGAGTGCTTCAAGACCCACGCGGAAGCCAGTGTGACCCGTCAAGCTTT
 CCGGAGGCGTCTTCAAGCTTTCAGGCTGTAAAGAGGCAAGAAGGTTTCCAGTGGTGTGAAAGAGATGG
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 TGTGGACTGTGTACATGGTGTGGTGGGCCAGCCTGTGGCCTGTTACAAATATGCCACCAACCCATGACC
 TATGTTGTAGGCATTGACAGTGTGGCTGGTCCGAGATGTTACTCAGAGGTATGACCCAGCCTGGATGA
 CCGCAACCCGCAAGTGCCGGTTGATGTGAGTGGTGGGCTGAGACCTTGAGACCCTATCGGAGCCTACT
 TACGGAGAGGGAGAAGAAGGAAGACCAGGAGTTTCAGGGCAAGCACCTGGACCAGCCTTTGCCACCTCC
 ATCAGCACATACAAGAACCACCCTCTGTATGCCCTGAAGCGCCACCTCTTGAAATTCAGGCTATCTACC
 CTGAGACAGCTGCGGTGCTCGGGTATTGTGCTGGAGAAGCAGTCTATTCCAGGGATTGCGTGCATACCTT
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 AACCTGAACCGGGTGGCACGCAAGCTGGCAGTCACTGCGTGCAGGCCATCACTGGCTTCGATTTCCATG
 GAGGCTATTGCCATCCAGTAAGTATGCTGCTGTGAGGAATTCAGAGACGTGCTGCTGGCTGC
 TTGGGAGAATGAACAGGCCATCATTGAAAAGAAGGAGAAGGAGAAAAAGGAAAAGCGGGCCTGGGGAAC
 TGGAAAGTGTGGTCAAGACTCCTCATCAGAGAGAGGCTGAAACTCCGCTATGGGGCCAAAGAGCGAGG
 CAGCAGCTCCCCATGCTGCTGGAGGCGGACTCTTCTGATGAAGAGGAAGGGACCAGTTACAAGCAGA
 AGCAGCCAGAGTCTGGTGCCTCCTGGCCACAGAACCGAGAGGATCCAGAACAGAAGTCCGAGTACACT
 AAGATGACTCGGAAGAGGCGGGCCAGAGGCTTCCCACCTCTTCCGTTTGAGAAGCTG

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >MR211103 protein sequence
 Red=Cloning site Green=Tags(s)

MAPKRTADGRRRRKRGQKTEDNKVARHEESVADDFEDEKQKPRRKSSFPKVSQGKRKRKGCSDPGDPTNGAA
 KKKVAKATAKSKNLKVLKEEALSDGDDFRDSPADCKKAKKHPKSKVVDQGTDEDDSEDDWEEVEELTEPV
 LDMGENSATSPSDMPVKAIEIEIETPQQAKERERSEKIKMEFETYLRRMMKRFNKEVQENMHKVLHLLCLL
 ASGFYRNSICRQPDLLAIGLSIIPIRFTKVPLQDRDAYLNSLVKWFIGTFTVNADLSASEQDDLQTTLE
 RRIAIYSARDNEELVHIFLLILRALQLLTRLVLSLQPIPLKSAVTKGRKSSKETSVEGPGGSSELSSNSP
 ESHNKPTTSRRRIKEEETLSEGRKATARGRGTGTAGSRQRRKPCSEGEAEQKVVQGRPHARKRRVAAK
 VSYKEESESDGAGSGSDFEPSSGEGQHSSDEDCEPGPRKQKRASAPQRTKAGSKSASKTQRGSQCDPSSF
 PEASSSSSGCKRGKVVSSGAEEMADRPAGVDQWLEVYCEPQAKWVCVDCVHGVVQPVACYKYATKPMT
 YVVGIDSDGWVRDVTQRYDPAWMTATRKCRVDAEWAAETLRPYRSLTTEREKKEDQEFQAKHLDQPLPTS
 ISTYKNHPLYALKRHLLKFQAIYPETA AVLGYCRGEAVYSRDCVHTLHSRDTWLKQARVVRLGEVPYKMY
 KGF SNRARKARLSEPLHDHNDLGLYGHWQTEEYQPIAVDGKVP RNEFGNVYLFPSMMPVGCVMQTLPL
 NLNRVARKLGIDCVQAITGDFHGGYCHPVTGDYIVCEEFRDVLAAWENEQAIIEKKEKEKKEKRALGN
 WKLLVIGLLIRERLKLRYGAKSEAAAPHAAGGGLSSDEEEGTSSQAEARVLAASWPQNREDPEQKSEYT
 KMTRKRRAAEASHLPFEKL

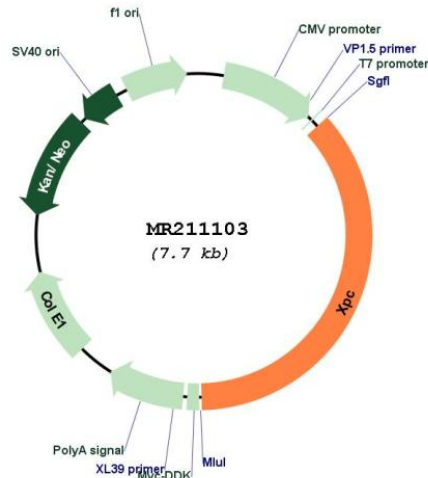
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_009531

ORF Size: 2793 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_009531.2](#), [NP_033557.2](#)

RefSeq Size: 3634 bp

RefSeq ORF: 2793 bp

Locus ID: 22591

UniProt ID: [P51612](#)

Cytogenetics: 6 D1

MW: 104.5 kDa

Gene Summary: Involved in global genome nucleotide excision repair (GG-NER) by acting as damage sensing and DNA-binding factor component of the XPC complex. Has only a low DNA repair activity by itself which is stimulated by Rad23b and Rad23a. Has a preference to bind DNA containing a short single-stranded segment but not to damaged oligonucleotides. This feature is proposed to be related to a dynamic sensor function: XPC can rapidly screen duplex DNA for non-hydrogen-bonded bases by forming a transient nucleoprotein intermediate complex which matures into a stable recognition complex through an intrinsic single-stranded DNA-binding activity.[UniProtKB/Swiss-Prot Function]