

## Product datasheet for **MG211103**

### **Xpc (NM\_009531) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Xpc (NM_009531) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Xpc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG211103 representing NM\_009531  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCCCAAAGCGCACCGCAGACGGAAGCGGGCGGAAGCGGGCCAGAAAACCGAGGACAACAAGTAG  
 CCCGGCACGAGGAGAGCGTTGCGGATGACTTTGAAGATGAGAAGCAGAAAACCCGAAGGAAGAGCTTTT  
 CCCGAAAAGTCTCTCAAGGAAAGAGGAAGAGGGGCTGCAGTGATCCAGGGACCCACAAATGGTGACGCA  
 AAAAAGAAAGTGGCCAAAGCCACTGCTAAATCCAAGAATCTCAAGGTTCTGAAGGAGGAAGCACTCAGCG  
 ACGGGGATGACTTCCGGGACTCACCAGCTGACTGCAAGAAGGCAAGAAACCCAAAAAGCAAGGTGGT  
 GGACCAAGGCACTGATGAAGATGACAGTGAGGATGACTGGGAGGAGGTGGAAGAGCTTACTGAACCTGTG  
 CTGGACATGGGAGAAAATCTGCCACCTCACCGTCTGACATGCCTGTGAAGGCGGTGGAGATTGAAATTG  
 AAACACCACAGCAGGCGAAAGAACGGGAAAGAAGTGAGAAGATAAAGATGGAGTTTGAGACATACCTGCC  
 GAGGATGATGAAGCGTTTCAATAAAGAAGTACAGGAGAACATGCACAAGTTTACCTGCTGTGCCTGCTG  
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 CATCGAACCTTCACTGTCAACGCTGACCTTTCAGCCAGCGAGCAGGACGACCTGCAGACCACCTTGGAA  
 AGGAGGATTGCCATTTACTCTGCGAGGGATAATGAAGAGTTGGTCCATATATTTCTTCTGATTCTTCGGG  
 CTCTGCAGCTGCTCACCCGGCTGGTCTTGTCTCTGCAGCCATTCCACTGAAGTCAGCTGTGACAAAAGG  
 GAGGAAATCTTCAAGGAGACATCTGTAGAGGGTCTGGAGGTTCTTCCAGAACTCTAGTAACAGTCCA  
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 GTGTCATACAAAGAGGAGAGTGAGAGCGATGGGGCAGGCAGCGGCTCTGACTTTGAACCGTCCAGTGGG  
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 CAGATAGGAAACCTGCTGGTGTAGACCAGTGGCTGGAGGTGTACTGTGAGCCACAGGCAAGTGGGTGTG  
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 TACGGAGAGGGAGAAGAAGGAAGACCAGGAGTTTCAGGGCAAGCACCTGGACCAGCCTTGGCCACCTCC  
 ATCAGCACATACAAGAACCACCCTCTGTATGCCCTGAAGCGCCACCTCTTGAAATTCAGGCTATCTACC  
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 GCACTCCAGGGACACATGGCTGAAGCAAGCAAGAGTGGTGGGCTTGGAGAAGTGGCCTATAAGATGGTG  
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 AACCTGAACCGGGTGGCAGCAAGCTGGCAGTCACTGCGTGCAGGCCATCACTGGCTTCGATTTCCATG  
 GAGGCTATTGCCATCCAGTAACCTGATGGCTACATTGTCTGTGAGGAATTCAGAGACGTGCTGCTGGCTGC  
 TTGGGAGAATGAACAGGCCATCATTGAAAAGAAGGAGAAGGAGAAAAAGGAAAAGCGGGCCTGGGGAAC  
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 CAGCAGCTCCCCATGCTGCTGGAGGCGGACTCTTCTGATGAAGAGGAAGGGACCAGTTTACAAGCAGA  
 AGCAGCCAGAGTCTGGTGCCTCCTGGCCACAGAACCGAGAGGATCCAGAACAGAAGTCCGAGTACACT  
 AAGATGACTCGGAAGAGGCGGGCCAGAGGCTTCCCACCTCTTCCGTTTGAGAAGCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG211103 representing NM\_009531  
 Red=Cloning site Green=Tags(s)

MAPKRTADGRRRKRGQKTEDNKVARHEESVADDFEDEKQKPRRKSSFPKVSQGKRKRGCSDPGDPTNGAA  
 KKKVAKATAKSKNLKVLKEEALSDGDDFRDSPADCKKAKKHPKSKVVDQGTDEDDSEDDWEEVEELTEPV  
 LDMGENSATSPSDMPVKAIEIEITPQQAKERERSEKIKMEFETYLRRMMKRFNKEVQENMHKVHLLCLL  
 ASGFYRNSICRQPDLLAIGLSIIPIRFTKVPLQDRDAYL SNL VKWF IGTF TVNADL SASEQDDLQTTLE  
 RRIAISARDNEELVHIFLLILRALQLLTRLVLSLQPIPLKSAVTKGRKSSKETSVEGPGGSSELSSNSP  
 ESHNKPTTSRRIKEEETLSEGRGKATARGRGTGTAGSRQRRKPCSEGEAEQVQGRPHARKRRVAAK  
 VSYKEESESDGAGSGSDFEPSSGEGQHSSDEDCEPGPRKQKRASAPQRTKAGSKSASKTQRGSQCDPSSF  
 PEASSSSSGCKRGKGVSSGAEEMADRPAGVDQWLEVYCEPQAKWVCVDCVHGVVQPVACYKYATKPMT  
 YVVGIDSDGWVRDVTQRYDPAWMTATRKCRVDAEWAAETLRPYRSL TEREKKEDQEFQAKHLDQPLPTS  
 ISTYKNHPLYALKRHLLKFQAIYPETA AVL GYCRGEAVYSRDCVHTLHSRDTWLKQARVVRLGEVPYKMV  
 KGF SNRARKARLSEPLHDHNDLGLYGHWQTEEYQPIAVDGKVP RNEFGNVYLFPSMMPVGCVMQTLPL  
 NLNRVARKLGIDCVQAITGDFDHGGYCHPVT DGYIVCEEFRDVL LAAWENEQAIIEKKEKKEKRALGN  
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 KMTRKRRAAEASHLPFEKL

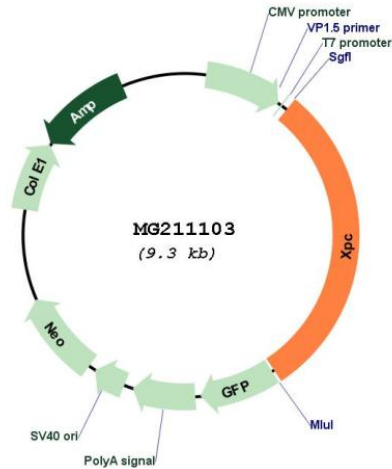
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_009531

**ORF Size:** 2790 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

**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]