

Product datasheet for **RG201994**

XPG (ERCC5) (NM_000123) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: XPG (ERCC5) (NM_000123) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: XPG
Synonyms: COFS3; ERCC5-201; ERCM2; UVDR; XPG; XPGC
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG201994 representing NM_000123
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGTCCAGGGCTCTGGAAGCTGCTGGAGTCTCCGGGCGGCAGGTCAGCCCCGAAGCGCTGGAAG
 GGAAGATCCTGGCTGTTGATATTAGCATTGGTTAAACCAAGCACTTAAAGGAGTCCGGGATCGCCACGG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG201994 representing NM_000123
 Red=Cloning site Green=Tags(s)

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MGVQGLWKLLECSGRQVSPEALEGKILAVDISIWLNQALKGVRDRHGNSIENPHLLTLFHRLCKLLFFRI
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TRTRPLE - GFP Tag - V

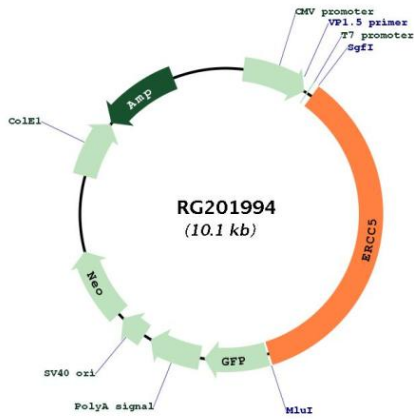
Restriction Sites: SgfI-MluI
 Cloning Scheme:



ACCN: NM_000123
 ORF Size: 3558 bp

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| 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_000123.2 , NP_000114.2 |
| RefSeq Size: | 4100 bp |
| RefSeq ORF: | 3561 bp |
| Locus ID: | 2073 |
| UniProt ID: | P28715 |
| Cytogenetics: | 13q33.1 |
| Domains: | HhH2, XPG_N, XPG_I |
| Protein Families: | Druggable Genome, Stem cell - Pluripotency, Transcription Factors |
| Protein Pathways: | Nucleotide excision repair |
| Gene Summary: | This gene encodes a single-strand specific DNA endonuclease that makes the 3' incision in DNA excision repair following UV-induced damage. The protein may also function in other cellular processes, including RNA polymerase II transcription, and transcription-coupled DNA repair. Mutations in this gene cause xeroderma pigmentosum complementation group G (XP-G), which is also referred to as xeroderma pigmentosum VII (XP7), a skin disorder characterized by hypersensitivity to UV light and increased susceptibility for skin cancer development following UV exposure. Some patients also develop Cockayne syndrome, which is characterized by severe growth defects, cognitive disability, and cachexia. Read-through transcription exists between this gene and the neighboring upstream BIVM (basic, immunoglobulin-like variable motif containing) gene. [provided by RefSeq, Feb 2011] |

Product images:



Circular map for RG201994