

## Product datasheet for **RC202425**

### **XPB (ERCC3) (NM\_000122) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	XPB (ERCC3) (NM_000122) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XPB
Synonyms:	BTF2; GTF2H; RAD25; Ssl2; TFIIH; TTD2; XPB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC202425 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:** >RC202425 protein sequence  
Red=Cloning site Green=Tags(s)

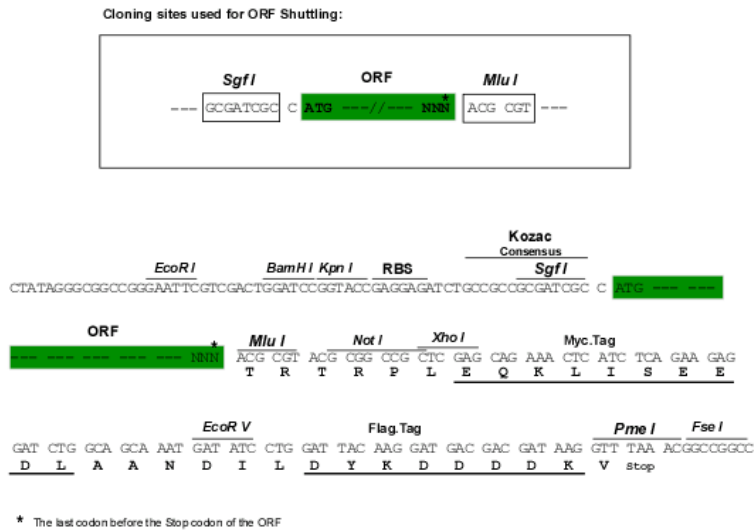
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FADNVFALKEYAIRLNKPYIYGPTSQGERMQILQNFKNPKINTIFISKVGDTSFDLPEANVLIQISSHG  
GSRRQEAQRLGRVLRKKG MVAEEYNAFFYSLVSQDTQEMAYSTKRQRF LVDQGY SFKVI TKLAGMEEED  
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KHVHPLFKRFRK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6209\\_h03.zip](https://cdn.origene.com/chromatograms/mk6209_h03.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**



**ACCN:** NM\_000122

**ORF Size:** 2346 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_000122.2](#)

**RefSeq Size:** 2751 bp

**RefSeq ORF:** 2349 bp

**Locus ID:** 2071

**UniProt ID:** [P19447](#)

**Cytogenetics:** 2q14.3

**Domains:** DEAD, helicase\_C

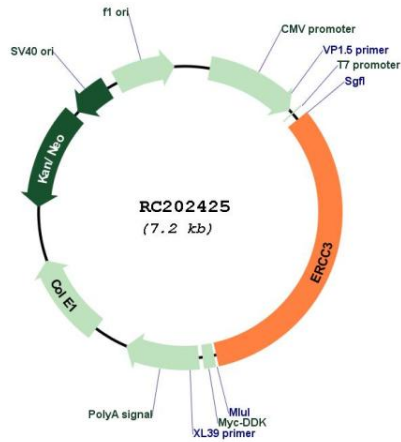
**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Nucleotide excision repair

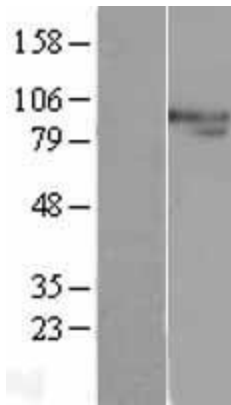
**MW:** 89.3 kDa

**Gene Summary:** This gene encodes an ATP-dependent DNA helicase that functions in nucleotide excision repair. The encoded protein is a subunit of basal transcription factor 2 (TFIIH) and, therefore, also functions in class II transcription. Mutations in this gene are associated with Xeroderma pigmentosum B, Cockayne's syndrome, and trichothiodystrophy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RC202425



Western blot validation of overexpression lysate (Cat# [LY424913]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202425 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).