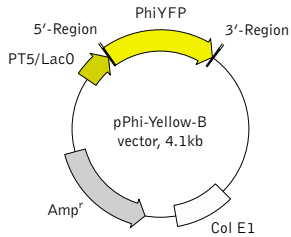


## pPhi-Yellow-B vector

The vector sequence has been compiled using the information from sequence databases, published literature, and other sources, together with partial sequences obtained by Evrogen. This vector has not been completely sequenced.



For vector sequence, please visit our Web site at <http://www.evrogen.com/products/vectors.shtml>

### 5' Region

[RBS] ATG. AGA. GGA. TCG. GGA. TCC. A . . .

$\xrightarrow{\text{PhiYFP}}$   
 $\xrightarrow{\text{BamH I}}$

### 3' Region

. . . TGA. AGC. TT . . .

$\xrightarrow{\text{STOP}}$   
 $\xrightarrow{\text{Hind III}}$

### Location of features

T5 promoter/lac operator element: 7-87  
 T5 transcription start: 61  
 PhiYFP coding sequence: 130-831  
 Lambda t0 transcriptional termination region: 852-946  
 rrnB T1 transcriptional termination region: 1708-1806  
 ColE1 origin of replication: 2282  
 beta-lactamase coding sequence: 3900-3040

### Vector description

pPhi-Yellow-B is a prokaryotic expression vector encoding yellow fluorescent protein PhiYFP. Reporter codon usage is optimized for high expression in mammalian cells (humanized) [Haas et al. 1996].

The vector is primarily intended as a source of PhiYFP coding sequence. Flanking restriction sites are convenient for excision of PhiYFP sequence and its further insertion into other expression vectors of choice. Alternatively, PhiYFP coding sequence can be amplified by PCR.

**Note:** The plasmid DNA was isolated from *dam*<sup>+</sup>-methylated *E. coli*. Therefore some restriction sites are blocked by methylation. If you wish to digest the vector using such sites you will need to transform the vector into a *dam*<sup>-</sup> host and make fresh DNA.

The vector can be also used for PhiYFP expression in prokaryotes under the control of T5 promoter/lac operator. The vector backbone contains ColE1 origin of replication and ampicillin resistance gene for propagation and selection in *E. coli*.

Product	Cat.#	Size
pPhi-Yellow-B vector	<b>FP603</b>	20 $\mu$ g
Vector type	bacterial expression vector	
Reporter	PhiYFP	
Reporter codon usage	mammalian	
Promoter for PhiYFP	T5 promoter/lac operator	
Host cells	prokaryotic	
Selection	ampicillin	
Replication	ColE1 ori	
Use	Source of the PhiYFP coding sequence; PhiYFP expression in bacterial cells	

### References

Haas, J. et al. (1996) "Codon usage limitation in the expression of HIV-1 envelope glycoprotein." *Curr Biol*, 6 (3): 315-324 / pmid: 8805248

### Notice to Purchaser:

PhiYFP-related materials (also referred to as "Products") are intended for research use only. The Products are covered by U.S. Pat. 7,951,923; European Pat. 03779067; and other Evrogen Patents and/or Patent applications pending. By use of these Products, you accept the terms and conditions of the applicable Limited Use Label License #001: <http://www.evrogen.com/products/Evrogen-FP-license.shtml>.

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