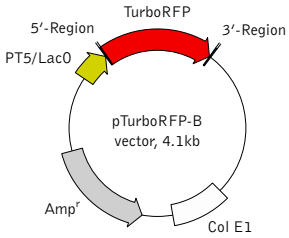
pTurboRFP-B vector

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

Product	Cat.#	Size
pTurboRFP-B vector	**FP233**	20 μg

Vector type	bacterial expression vector
Reporter	TurboRFP
Reporter codon usage	mammalian
Promoter for TurboRFP	T5 promoter/lac operator
Host cells	prokaryotic
Selection	ampicillin
Replication	ColE1 ori
Use	Source of the TurboRFP coding sequence; TurboRFP expression in bacterial cells

5' Region **3' Region**

RBS ATG.AGA.GGA.TCG.GGA.TCC.ATG.AG . . . . . TGA.AGC.TT . . .
STOP STOP
BamH I Hind III

Location of features

T5 promoter/lac operator element: 7-87
T5 transcription start: 61
TurboRFP coding sequence: 132-827
Lambda t0 transcriptional termination region: 848-942
rrnB T1 transcriptional termination region: 1704-1802
ColE1 origin of replication: 2278
beta-lactamase coding sequence: 3896-3036

Vector description

pTurboRFP-B is a prokaryotic expression vector encoding red (orange) fluorescent protein TurboRFP. 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 TurboRFP coding sequence. Flanking restriction sites are convenient for excision of TurboRFP sequence and its further insertion into other expression vectors of choice. Alternatively, TurboRFP coding sequence can be amplified by PCR.

Note: The plasmid DNA was isolated from dam$^+$-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$^-$ host and make fresh DNA.

The vector can be also used for TurboRFP 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*.

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