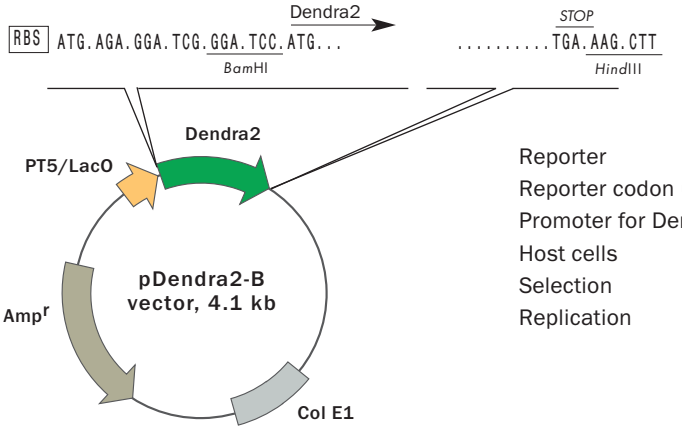
Bacterial expression vector pDendra2-B

Product	Cat.#	Size
pDendra2-B	**FP823**	20 µg

Please contact your local distributor for exact prices and delivery information.



Reporter	Dendra2
Reporter codon usage	mammalian
Promoter for Dendra2	T5 promoter/lac operator
Host cells	prokaryotes
Selection	ampicillin
Replication	ColE1 ori

For vector sequence, please visit our Web site at www.evrogen.com/support/vector-info.shtml

Use

- Dendra2 expression in bacterial cells using T5 promoter/lac operator

- Source of the Dendra2 coding sequence

Vector description

pDendra2-B is a prokaryotic expression vector encoding photoswitchable green-to-red fluorescent protein Dendra2. 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 Dendra2 coding sequence. Flanking restriction sites are convenient for Dendra2 gene excision and its further insertion into other expression vectors of choice. Alternatively, Dendra2 coding sequence can be amplified by PCR.

Note: The plasmid DNA was isolated from dam$^+$-methylated *E.coli*. Therefore some restriction sites are bloked 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 Dendra2 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*.

Location of features:

T5 promoter/lac operator element: 7-87
T5 transcription start: 61
Dendra2 coding sequence: 133-822
Lambda t0 transcriptional termination region: 871-965
***rrn*B T1 transcriptional termination region:** 1727-1825
ColE1 origin of replication: 2301
beta-lactamase coding sequence: 3919-3059

References

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