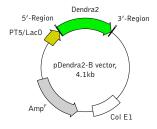


# pDendra2-B vector

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/support/vector-info.shtm

Product	Cat.#	Size
pDendra2-B vector	FP823	20 $\mu$ g

The price does not include delivery. The price varies in different countries. Please contact your local distributor for exact prices and delivery information.

Vector type bacterial expression vector Reporter Dendra2

Reporter codon usage mammalian

Promoter for Dendra2 T5 promoter/lac operator

Host cells prokaryotic
Selection ampicillin
Replication ColE1 ori

Use Source of the Dendra2 coding sequence; Dendra2

expression in bacterial cells

5' Region 3' Region  $\underbrace{ \frac{BBS}{BBM} \text{ ATG. AGA. GGA. TCG. } \underbrace{\frac{BGA. TCG.}{BBMH} I} \underbrace{\frac{BBOP}{ATG. AG. CTT} \dots \underbrace{\frac{STOP}{HIND III}} \underbrace{\frac{AAG. CTT}{HIND III}} \dots \underbrace{\frac{BBOP}{HIND III}} \underbrace{\frac{BBMH}{BBMH} I}$ 

#### **Location of features**

T5 promoter/lac operator element: 7-87 T5 transcription start: 61 DendraV coding sequence: 133-822 Lambda 10 transcriptional termination region: 871-965

rrnB T1 transcriptional termination region: 1727-1825 CoIE1 origin of replication: 2301

beta-lactamase coding sequence: 3919-3059

#### **Vector description**

pDendra2-B is a prokaryotic expression vector encoding green 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<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 Dendra2 expression in prokaryotes under the control of T5 promoter/lac operator. The vector backbone contains CoIE1 origin of replication and ampicillin resistance gene for propagation and selection in *E. coli*.

### References

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

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