

MCS₁

			NheI		HindII	I
		PvuII		NotI		SalI
	BamHI		MluI	EagI	ClaI	EcoRV
601	GGGATCCTCT	AGTCAGCTGA	CGCGTGCTAG	CGCGGCCGCA	TCGATAAGCT	TGTCGACGAT

CCCTAGGAGA TCAGTCGACT GCGCACGATC GCGCCGGCGT AGCTATTCGA ACAGCTGCTA

EcoRV

661 ATCTCCAGAG
TAGAGGTCTC

MCS 2

	XbaI	PstI	BglII	ApaI		EcoRI
2981	GATCCTCTAG	ACTGCAGCCT	CAGGAGATCT	GGGCCCCCGC	GGCATATGAC	CGGTGAATTC
	CTACCACATC	TCACCTCCCA	CTCCTCTACA	cccaaaaaa	СССТАТАСТС	CCCACTTAAC

pBI-CMV1 Vector Map and Multiple Cloning Sites (MCS 1 and 2).



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Description

pBI-CMV1 is a mammalian bidirectional expression vector that allows the constitutive expression of two proteins of interest. Protein expression is driven by one of two constitutively active, minimal human cytomegalovirus promoters, $P_{\text{minCMV2}'}$ and $P_{\text{minCMV2}'}$ located just upstream of two independent multiple cloning sites (MCS 1 and MCS 2, respectively). To allow propagation and selection in *E. coli*, the vector also contains a CoIE1 origin of replication and an ampicillin resistance gene (Amp^r).

Use

pBI-CMV1 is designed to simultaneously and constitutively express two genes of interest. Each gene must be cloned into a different MCS, and contain both an initiation codon and a stop codon. The pBI-CMV1 vector can be transfected into mammalian cells using any standard transfection method.

(PR963272; published 17 June 2009)

pBI-CMV1 **Vector Information**

Location of features

- Enhancer: 64-473
- $P_{\min CMV1}$ (minimal human cytomegalovirus promoter 1): 474–599
- MCS 1 (multiple cloning site 1): 602-663
- SV40 polyA signals: 675–862
- ColE1 origin of replication: 1038–1637
- Ampr (ampicillin resistance gene): 1799–2659 (complementary)
- SV40 polyA signals: 2795–2982 (complementary)
- MCS 2 (multiple cloning site 2): 2986-3040
- P_{minCMV2} (minimal human cytomegalovirus promoter 2): 3046–3114

Propagation in *E. coli*

- Recommended host strain: DH5 α^{TM} and other general purpose strains.
- Selectable marker: plasmid confers resistance to ampicillin (100 µg/ml) in E. coli hosts.
- E. coli replication origin: ColE1
- Copy number: low
- Plasmid incompatibility group: pMB1/ColE1

Note: The vector sequence was compiled from information in the sequence databases, published literature, and other sources, together with partial sequences obtained by Clontech. This vector has not been completely sequenced.

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