

MCS₁

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

GGGATCCTCT AGTCAGCTGA CGCGTGCTAG CGCGGCCGCA TCGATAAGCT TGTCGACGAT
CCCTAGGAGA TCAGTCGACT GCGCACGATC GCGCCGGCGT AGCTATTCGA ACAGCTGCTA

EcoRV

661 ATCTCCAGAG
TAGAGGTCTC

MCS 2

	XbaI	Pstl	BglII	Apal		EcoRI
2981	GATCCTCTAG	ACTGCAGCCT	CAGGAGATCT	GGGCCCCCGC	GGCATATGAC	CGGTGAATTC
	CTACCACATC	TCACCTCCCA	CTCCTCTACA	CCCGGGGGGG	CCCTTTTTCTC	$CCC\Lambda CTT\Lambda \Lambda C$

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_{minCMV2} and P_{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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