

Plasmid pcam-BSD, for Transfection in *Plasmodium falciparum*

Catalog No. MRA-848

Product Description: MRA-848 is a *Plasmodium falciparum* (*P. falciparum*) transformation plasmid, which expresses the blasticidin–deaminase (*bsd*) selectable marker under the control of a *P. falciparum* calmodulin promoter. Plasmid pcam-BSD is useful for genetic element studies and calmodulin gene disruption in *P. falciparum*; select with geneticin (G418).

Lot¹: 64136544

Manufacturing Date: 02JUN2016

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing (4520 base pairs)	Report results	99.3% sequence identity to depositor's sequence (Figures 1 and 2)
Concentration by PicoGreen[®] Measurement	Report results	50 ng/μL
Amount	Report results	~ 500 ng per vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9

¹Extracted using a QIAprep[®] Spin Miniprep Kit (QIAGEN[®] 27104)

Date: 06 DEC 2016

Signature: 

BEI Resources Authentication

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC[®]'s knowledge.

ATCC[®] is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.



Figure 1: Complete Plasmid Sequence of MRA-848

```
>MRA-848 |lot_64136542| complete plasmid sequence
CTAAATTGTAAGCGTTAATATTTTGTAAAATTCGCGTTAAATTTTGTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGG
CAAAATCCCTTATAAATCAAAAAGATAGACCGAGATAGGGTTGAGTGTGTTCCAGTTTGAACAAGAGTCCACTATTAAGAAG
GTGGACTCCAACGTCAAAGGGCGAAAACCGTCTATCAGGGCGATGGCCCACTAGTGAACCATCACCTAATCAAGTTTTTTG
GGTCCGAGGTGCCGTAAAGCACTAAATCGGAACCCCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAAGC
TGGCGAGAAAGGAAGGAAAGCAAAAGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTACAGCTGCGCGTAACCA
CCACACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGTCCCATTGCGCATTAGGCTGCGCAACTGTTGGGAAGGGCGATC
GGTGCAGGGCTCTTCGCTATTACGCCAGCTGGCGAAAGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGTTT
TCCCAGTACAGCGTTGTAAAACGACGGCCAGTGAGCGCGCGTAATACGACTCACTATAGGGCGAATTGGGTACCCCATGGGA
ATTCTATATGTGATTAATTTTATATATTATCAATATATATATTTTTAAATGCTTACTTAATTATCTTTTTTTTTTTTTTTTTTCC
CTCTTTTTATATTTAATTTTTGAAAAAATTGATATATATATATATATAATATATATATATACATGTAGTAGTATTAACAAT
GTATAATATATAAATAAATATATATATATATATATATATATATATATATATATATATATATATATATATATATATATATAT
AATTATATTCATATAAGTTATGCATTTTTTATAAACATTATTCAATATATGTATAATATAATATATATATATATATATATAT
AATGTGCATGATAAAAAGAAAAAATAATATTTATAAAAAAAGAAAAAATAAAACAAAAAAGAAAAAATACATATATATATAT
AATAAAAAAATAAATAAATTTATAATTATATATTCTGTCAATAAAAAATATATATATATATATATATATATATATATATAT
TTAAACTAGAAAAGGAATAACTAATATTTTATTTATTCATTCAAGATTTATATTTTATAATAATAAATACCTAATAGAAATATC
AATGGTGATGCCAAGCCTTTGTCTCAAGAAGATCCACCCTCATTGAAAGAGCAACGGCTACAATCAACAGCATCCCCATCTC
TGAAGACTACAGCGTCCGACGCGAGCTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTTACTGGGG
GACCTTGTGCAGAACTCTGGTGTCTGGCAGTCTGCTGCTGCGGCAGCTGGCAACCTGACTTGTATCGTCGCGATCGGAAA
TGAAACAGGGGCATCTTGAGCCCCGCGGACGGTCCGACAGGTGCTTCTCGATCTGCATCTGGGATCAAGCCATAGTG
AAGGACAGTGATGGACAGCCGACGGCAGTTGGGATTCGTGAATTGCTGCCCTCTGGTTATGTGTGGGAGGGCTAAGCACTT
GTGGCCGAGGAGCAAAGCTTATAAAAAAATAAAACATAAAACACAGAAATACAAAAAATAACATATGAATTTTTTTTTGTAACTT
CCTTATAAATATAGAATAATGAATCATATAAAACATATCATTATTCATTTATTTACATTTAAAATTATTGTTTCAGTATCTTAAATTA
TTATGTATATATAAAATAACTTACAATTTTATAAATAAATATATGTTTATTAATTCATGTTTTGTAATTTATGGGATAGCGATT
TTTTACTGTCTGATTTTTCTTTTTAATTATGTTTTAATTGTATTTTATTTTATTTTATTTGTTCTTTTTATAGTATTATTTAAACAAA
ATGTATTTTCTAAGAATCTATAATAATAAATAAATAAATTTAATAAAAAATTAATTTATCTTTTACAATATGAACATAAAGTACAAC
ATTAATATATAGCTTTTAAATTTTTTATTCTAATCATGTAAATCTTAAATTTTTCTTTTTAAACATATGTTAAATATTTTCTCATT
ATATATAAGAACATATTTTAAACTGCAGCCCCGGGGATCCACTAGTTCTAGAGCGGCCGCCACCAGCGGTGGAGCTCCAGCT
TTTGTTCCTTTAGTGAGGGTTAATTGCGCGCTTGGCGTAATCATGGTCATAGCTGTTTCTGTGTGAAATTGTTATCCGCTCAC
AATTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTT
GCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGGCGGT
TTGCGTATTGGGCGCTCTCCGCTTCCGCTCACTGACTCGCTGCGCTCGGTGCTCCGGCTGCGGCGAGCGGTATCAGCTCA
CTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAAGAAAGAACATGTGAGCAAAGGCCAGCAAAGGCCA
GGAACCGTAAAAAGCCGCTTGTCTGGCGTTTTTCCATAGGCTCCGCCCTGACGAGCATCAAAAAATCGACGCTCAAGT
CAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGCGTTTTCCCGCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGAC
CCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCCGGAAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCA
GTTCCGGTGTAGGTGTTCCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGGTTCCAGCCGACCGCTGCGCCTTATCCGGTAA
CTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGT
ATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGC
TGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGTTTTTTTTGTTT
GCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAAGTGAAC
GAAAACCTCAGTTAAGGGATTTGGTCAATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTAATAAAGTAAAGTTTAA
ATCAATCTAAAGTATATATAGATAAATTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTA
TTTTGTTTATCCATAGTTGCCTGACTCCCCGCTGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCA
ATGATACCGCGAGACCCACGCTCACCAGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTG
GTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGAAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAGTTTGGC
CAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTTCAATTCAGCTCCGGTCCCAACGATC
AAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAAGCGTTAGCTCCTTCCGTCCTCCGATGTTGTCAAGTAAGTTGGC
CAGAGTGTATCACTCATGTTATGGCAGCACTGATAAATCTTACTGTTCTGATCCATCCGTAAGATGCTTTTTCTGTGACTGGT
GAGTACTCAACCAAGTCAATCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTCCCGGCGTCAATACGGGATAATACCGC
GCCACATAGCAGAACTTTAAAGTGCTCATCATTGAAAACGTTCTTCCGGGGCGAAAACCTCAAGGATCTTACCGCTGTTGAG
ATCCAGTTGATGTAACCCACTCGTGCACCCAACTGATCTTACGATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACA
GGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGAAATGTTGAATACTCATACTTCTTTTTCAATATTTGAA
GCATTTATCAGGGTTATTGTTCTCATGAGCGGATACATATTTGAATGATTTAGAAAAATAAACAATAGGGGTTCCGCGCACATT
TCCCCGAAAAGTGCCAC
```

Figure 2: Plasmid Map of MRA-848 / pcam-BSD

