

Supplementary Fig. 2 Full sequence of the B2H vector pBR-UV5-GP-FD2 (3508 bp)

GAATTCGGGCTTTACACTTTATGCTTCCGGCTCGTATAATGTGTGCGACTTGT
GAGCGGATAACAATTTACACAGGAAACAGCTATGCCTCAACAGCAGCAAAT
GCAACCTCCCAATTC AAGTGC GGACAACAACCCTTTGCAACAGCAATCATCA
CAAATACCGTACCAAACGTCCTCAACCAAATTAACCAAATCTTTTCTCCAG
AGGAGCAACGCAGCTTATTACAAGAAGCCATCGAAACCTGCAAGAATTTTGA
AAAAACACAATTGGGTAGTACGATGACGGAACCTGTCAAGCAAAGTTTTATT
AGGAAATACATTGTGCAAAAGGCCCTGAGAAAAATCCAAGCTTTGGCGGCCG
CTGACTACAAAGACGATGATGACAAATCTAGACCCGGGGAGGTCTTCTAAGT
GAGGATCCTAAGTAAGAAGACATGCACAGTAGTAAGTAGAGACTAGAAAA
GGCCGACAAGTCCCGCTCCGCTGAAGATCCTGGCGTAATAGCGAAGAGGCC
GCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAATGGGACGC
GCCCTGTAGCGGCGCATTAAGCGCGGGGTGTGGTGGTTACGCGCAGCGTG
ACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCCTTCC
TTTCTCGCCACGTTTCGCCGGCTTTCCCGTCAAGCTCTAAATCGGGGGCTCCC
TTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAACTTGATT
AGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCT
TTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCAAACTGGAAC
AACACTCAACCCTATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCGAT
TTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAACGCGAATT
TTAACAAAAATATTAACGCTTACAATTTAGGTGGCACTTTTTCGGGGAAATGTGC
GCGGAACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCA
TGAGACAATAACCCTGATAAATGCTTCAATAATATTGAAAAAGGAAGAGTAT
GAGTATTCAACATTTCCGTGTCGCCCTTATTCCCTTTTTTTCGGGCATTTTGCCT
TCCTGTTTTTGTACACCAGAAACGCTGGTGAAAGTAAAAGATGCTGAAGAT
CAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAACAGCGGTAAGA
TCCTTGAGAGTTTTTCGCCCGAAGAACGTTTTTCCAATGATGAGCACTTTTAAA
GTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGCAAGAGCAACT
CGGTCGCCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTCA
CAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGC
CATAACCATGAGTGATAACACTGCGGCCAACTTACTTCTGACAACGATCGGA
GGACCGAAGGAGCTAACCGCTTTTTTGCACAACATGGGGGATCATGTAACTC
GCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCG
TGACACCACGATGCCTGTAGCAATGGCAACAACGTTGCGCAAACCTATTAAC
GGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAATAGACTGGATGGAGG
CGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTT
ATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGGTATCATTGCAG
CACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGG
GAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCTGAGATAGGTGC
CTCACTGATTAAGCATTGGTAACCTGTCAGACCAAGTTTACTCATATATACTTT
AGATTGATTTAAAACCTTCATTTTTAATTTAAAAGGATCTAGGTGAAGATCCTT
TTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGC
GTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGC
GCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTG

TTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCA
 GAGCGCAGATACCAAATACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCA
 CTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTAC
 CAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAG
 ACGATAGTTACCGGATAAGGCGCAGCGGTTCGGGCTGAACGGGGGGTTCGTGC
 ACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGC
 GTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGT
 ATCCGGTAAGCGGCAGGGTTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAG
 GGGGAAACGCCTGGTATCTTTATAGTCCTGTTCGGGTTTCGCCACCTCTGACTT
 GAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAACG
 CCAGCAACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACA
 TGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTACCGCCTTTG
 AGTGAGCTGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGT
 GAGCGAGGAAGCGGAAGAGCGCCTGATGCGGTATTTTCTCCTTACGCATCTG
 TCGGGTATTTACACCCGCATATGGTGCCTCTCAGTACAATCTGCTCTGATGC
 CGCATAGTTAAGCCAGTATACTCCGCTATCGCTACGTGACTGGGTTCATGGC
 TCGCCCCGACACCCGCCAACACCCGCTGACGCGCCCTGACGGGCTTGTCTG
 CTTCCGGCATCCGCTTACAGACAAGCTGTGACCGTCTCCGGGAGCTGCATGT
 GTCAGAGGTTTTACCGTCATCACCGAAACGCGCGAGGCAGCTGCGGTAAAG
 CTCATCAGCGTGGTCGTGAAGCGATTCACAGATGTCTGCCTGTTTCATCCGCGT
 CCAGCTCGTTGAGTTTCTCCAGAAGCGTTAATGTCTGGCTTCTGATAAAGCGG
 GCCATGTTAAGGGCGGTTTTTTTCCTGTTTGGTCACTGATGCCTCCGTGTAAGG
 GGGATTTCTGTTTCATGGGGGTAATGATACCGATGAAACGAGAGAGGATGCTC
 ACGATACGGGTTACTGATGATGAACATGCCCGGTTACTGGAACGG

Plasmid features:

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|---------------|--|
| nts 12-17 | lacUV5 promoter -35 box |
| nts 36-41 | lacUV5 promoter -10 box |
| nt 48 | lacUV5 promoter transcription start point |
| nts 86-88 | Start codon for Gal11P protein fragment |
| nts 89-358 | Coding sequence for Gal11P a.a. 263-352 (with additional translationally silent mutations) |
| nts 407-412 | BbsI site #1 |
| nts 433-438 | BbsI site #2 |
| nts 568-1024 | f1 phage origin of replication |
| nts 1156-2013 | beta-lactamase gene cassette (confers resistance to ampicillin and carbenicillin) |
| nts 2016-2956 | ColE1 origin of replication (plasmid origin) |
| nts 3203-3390 | rop gene (associated with regulation of copy number) |