

## Supplementary information

# Biosensor-based isolation of amino acid-producing *Vibrio natriegens* strains

### Author list

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Table S1

Oligonucleotides used in this study

<b>name</b>	<b>sequence</b>
<i>Irp_fw</i>	tgccgggcctcttgcgggattcacacctggggcgagc
<i>Irp_rv</i>	atgaagctagattccattgatcgcg
<i>Irp_eYFP_fw</i>	tgaaaaggaggagaataatctatggtagcaaggcgag
<i>Irp_eYFP_rv</i>	ttgcatcaacgcatatagcgttactgtacagctcgtccatg
<i>PbrnFE_rv</i>	agattattctcctctttcagcttgaatgaatcctctgc
<i>P100_PbrnFE_fw</i>	tcaatggaatctagcttcatagattatttctcctcttttcattgacggctagctcagtcctaggtacagtgtagcatattgcacaatagcctag
<i>P101_PbrnFE_fw</i>	tcaatggaatctagcttcatagattatttctcctcttttcattacagctagctcagtcctaggtattatgtctagcatattgcacaatagcctag
<i>P104_PbrnFE_fw</i>	tcaatggaatctagcttcatagattatttctcctcttttcattgacagctagctcagtcctaggtattgtctagcatattgcacaatagcctag
<i>P106_PbrnFE_fw</i>	tcaatggaatctagcttcatagattatttctcctcttttcattacggctagctcagtcctaggtatagtgctagcatattgcacaatagcctag
<i>P108_PbrnFE_fw</i>	tcaatggaatctagcttcatagattatttctcctcttttcactgacagctagctcagtcctaggtataatgtctagcatattgcacaatagcctag
<i>P110_PbrnFE_fw</i>	tcaatggaatctagcttcatagattatttctcctcttttcattacggctagctcagtcctaggtacaatgtctagcatattgcacaatagcctag
<i>lysG_eYFP_fw</i>	cactatggcgtgctgcccgggtaattaaggcgccactagtagtggtgagcaaggcgag
<i>lysG_eYFP_rv</i>	gagtgaacgttatctagactgtacagctcgtcc
<i>lysG_araC_fw</i>	gtctagataacgtttcactccatcaaaaaaac
<i>lysG_araC_rv</i>	gcgtccggcgtagagttatgacaactgacggc
<i>lysG_fw</i>	gtcactatggcgtgctgcccctaaggcccaatccctc
<i>lysG_rv</i>	tgaaaaggaggagaataatctatgaacccattcaactgg
<i>PlysE_100_fw</i>	tagccgtcaatgaagctatattaacatgttaag
<i>PlysE_108_fw</i>	tagctgtcagtgaaagctatattaacatgttaag
<i>PlysE_101_fw</i>	tagctgtaaatgaagctatattaacatgttaag
<i>PlysE_106_fw</i>	tagccgtaaatgaagctatattaacatgttaag
<i>PlysE_110_fw</i>	tagccgtaaatgaagctatattaacatgttaag
<i>PlysE_104_fw</i>	tagctgtcaatgaagctatattaacatgttaag
<i>PlysE_rv</i>	cctcgccctgctcaccatagattatttctcctcttttcattcctaggtccgatggacag
<i>P100_lysG_fw</i>	agattattctcctcttttcagctagcactgtacctaggactgagctagccgtaatgaagcta
<i>P100_lysG_rv</i>	tagcttcattgacggctagctcagtcctaggtacagtgctagctgaaaaggaggagaataatct
<i>P108_lysG_fw</i>	agattattctcctcttttcagctagcattatacctaggactgagctagctgtcagtgaaagcta
<i>P108_lysG_rv</i>	tagcttcactgacagctagctcagtcctaggtataatgtctagctgaaaaggaggagaataatct
<i>P101_lysG_fw</i>	agattattctcctcttttcagctagcataatacctaggactgagctagctgtaaatgaagcta
<i>P101_lysG_rv</i>	tagcttcattacagctagctcagtcctaggtattatgtctagctgaaaaggaggagaataatct
<i>P106_lysG_fw</i>	agattattctcctcttttcagctagcactatacctaggactgagctagccgtaaatgaagcta
<i>P106_lysG_rv</i>	tagcttcattacggctagctcagtcctaggtatagtgctagctgaaaaggaggagaataatct
<i>P110_lysG_fw</i>	agattattctcctcttttcagctagcattgtacctaggactgagctagccgtaaatgaagcta
<i>P110_lysG_rv</i>	tagcttcattacggctagctcagtcctaggtacaatgtctagctgaaaaggaggagaataatct
<i>P104_lysG_fw</i>	agattattctcctcttttcagctagcacaatacctaggactgagctagctgtcaatgaagcta
<i>P104_lysG_rv</i>	tagcttcattgacagctagctcagtcctaggtattgtctagctgaaaaggaggagaataatct

Supplementary data 1

Excel table containing the mutations identified in isolated producer mutants, with a frequency more than 50%.

Supplementary data 2

Genebank file of plasmid pBR322-J23100-Lrp-P<sub>brnFE</sub>-eYFP, all other Lrp-based biosensor plasmid used in this study were identical, except for the indicated P100 promoter regions, which was changed to the corresponding Anderson promoter sequence

Supplementary data 3

Genebank file of plasmid pBR322-J23100-LysG-P<sub>lysE</sub>-eYFP, all other LysG-based biosensor plasmid used in this study were identical, except for the indicated P100 promoter regions, which was changed to the corresponding Anderson promoter sequence