

**Supplementary Table S1 – Oligonucleotides designed and used in this study.**

Name	Sequence (5' → 3')	Restriction enzyme/ Product length (bp)
NGO2139-up-F	AAGCCTGAATTCCGACTGGTGGAAACAAAAC	<i>EcoRI, KpnI, 543</i>
NGO2139-up-R	ATCCGCGGTACCGGTTTTGAAGAAGGTTTTTC	
NGO2139-down-F	GCTCAGGGATCCATGAAGGCGCAGCCAAAT	<i>BamHI, HindIII, 548</i>
NGO2139-down-R	GATTCGAAGCTTGCTTCGGAAACGGATTATAC	
NGO2121-up-F	AGTCCTGAATTCCGTCAATATGGACTTTACC	<i>EcoRI, KpnI, 543</i>
NGO2121-up-R	ATCCGCGGTACCCGTAGGCGGTTTTTTTTTC	
NGO2121-down-F	GCTCAGGGATCCGCAACCTGGAACACAACCC	<i>BamHI, HindIII, 512</i>
NGO2121-down-R	GATTCGAAGCTTGAAGGCTTCGCGGGCAAG	
NGO2111-up-F	AGTCCTGAATTCAATGCCGGATGTGTTTTGCG	<i>EcoRI, KpnI, 558</i>
NGO2111-up-R	ATCCGCGGTACCAAACGCCGCAAGCCCCA	
NGO2111-down-F	GCTCAGGGTACCTCGGCGGATTGGCGGTTT	<i>BamHI, HindIII, 547</i>
NGO2111-down-R	GATTCGAAGCTTTTCAGACGGCATCAGCCTG	
NGO1985-up-F	CTATCGATGAGCTCTGCCGACGCGCAACACTT	<i>SacI, KpnI, 512</i>
NGO1985-up-R	ATCCGCGGTACCCGGTGTGTGGTTTTGGTTTTTC	
NGO1985-down-F	GCTCAGGGATCCCCAAAACACTACGTCCAACGC	<i>BamHI, HindIII, 522</i>
NGO1985-down-R	GATTCGAAGCTTGGGCGTTTGTGGGCAGTA	
NGO1955-up-F	AGTCCTGAATTCTCTGCCCGCGCAGGTTAT	<i>EcoRI, KpnI, 544</i>
NGO1955-up-R	ATCCGCGGTACCCTGTCCGGTGTGGTATCCGT	
NGO1955-down-F	GCTCAGGGATCCGGAAACGGCAAAGGGAAA	<i>BamHI, HindIII, 524</i>
NGO1955-down-R	GATTCGAAGCTTCGAAGGGCGCATTATGGT	
NGO1344-up-F	AGTCCTGAATTCTTCCGCCAACCGTCTG	<i>EcoRI, KpnI, 580</i>
NGO1344-up-R	ATCCGCGGTACCGTGGAACCCGATAATAAATCC	
NGO1344-down-F	ATGTAAGTCTGCAGGCTCAAACCTAAAGAACCG	<i>BamHI, HindIII, 548</i>
NGO1344-down-R	GATTCGAAGCTTAGCAGTTCTCCGAAATCA	
Primers used to verify in-frame deletion mutants		
NGO2139-check-F	TCTTCGTAACCTCCAGCCGC	
NGO2139-check-R	CTATAATAGCCGTTTTGCCG	
NGO2121-check-F	GGCAACCCTTGGCGTAC	
NGO2121-check-R	GGCGGCATGAAAACCTGCAA	
NGO2111-check-F	GATAAAGATGCGGCTGCCG	
NGO2111-check-R	ACTGCGCCCCGATTTTCG	
NGO1985-check-F	AAATCGCCCTTGATACCG	
NGO1985-check-R	ACACTTTATGCTTCCGGCTC	
NGO1955-check-F	GGCGGAATTTCTCGCAG	
NGO1955-check-R	CATTCTTTGTCAAACGACGCGC	
NGO1344-check-F	CGGCAGAATGGTGCTTGTC	
NGO1344-check-R	AAACGAAACCGCGTTGGAAG	
Primers used to create complemented strain $\Delta ngo1985/P_{lac}ngo1985$		

