Homology Arm Sequences

Homology arms used for CRISPR-Assisted λ-Red constructs. Each upstream and downstream homology arm is 450 bp in length. All sequences are presented in the 5′ to 3′ direction.

CRISPR-Assisted λ-Red Homology Arms

Target information	Details
Target name	*proL*
Region type	Promoter replacement
Genomic locus	「2,181,018」 - 「2,181,048」

Upstream homology arm	DNA sequence 5′ → 3′
1–50	TGCCGGTCGGGGTATTCCACTGAGCGAAGAGGAAGAAACCTTTGACTGGT
51–100	CCCACGGTCATCTGCAGGTACCATTAGTGATTCACTGGCCAGGCACGCCG
101–150	GCGCAGCGTATTAATGCTCTGACGGATCATACCGATCTGATGACGACACT
151–200	GATGCAACGCCTGCTACATGTCAGCACACCTGCCAGCGAATATTCGCAAG
201–250	GTCAGGATTTGTTCAACCCTCAACGCCGTCATTACTGGGTTACCGCAGCG
251–300	GATAACGATACGCTGGCAATTACCACCCCGAAAAAGACGCTGGTGCTGAA
301–350	CAATAACGGTAAATACCGCACTTACAACTTACGTGGTGAAAGAGTGAAAG
351–400	ATGAAAAACCACAGTTAAGTTTGTTATTGCAAGTGCTGACAGACGAGAAG
401–450	CGTTTTATCGCTAACTGATTAATTATAAATCAGTTAGCGAAATATCTTAC

Downstream homology arm	DNA sequence 5′ → 3′
1–50	CAGCCACGAGTCGGCACGTAGCGCAGCCTGGTAGCGCACCGTCATGGGGT
51–100	GTCGGGGGTCGGAGGTTCAAATCCTCTCGTGCCGACCAAAAATCCCAAGA
101–150	AAAAACCAACCCTTACGGTTGGTTTTTTTATATCTGCAATTAATTCGATA
151–200	AACAGACCGTGACACATCACAGCCTGTTTATTTTCTGTTATCAGAACGTC
201–250	CAGACCACACCCGCCTGAGTATTCCACGGCGATTCTACCCCTGCGCCATT
251–300	GCCATAGCTGACTGACAAATGACCGCTTAACGTCGGGGTAAACGATGACC
301–350	TTATCCCAGCCTGATAAACGCCACTGGTTCCAGCCACATCATTATTAAAT
351–400	TTGCCATCGTCATTAACTTTCACCTGGTTAGAATCGGCGTATTCCTGACG
401–450	CACGGCCGCTTTCAGCCAGGGTTCCAGCGTCGTACCGTTTTGCAGGTCCA

Target information	Details
Target name	*tyrV&tyrT*
Region type	Copy number reduction
Genomic locus	「1,275,036」 - 「1,275,414」

Upstream homology arm	DNA sequence 5′ → 3′
1–50	ATCATCAATATTCACCATTCATTCCTGCCAGCGTTTATTGGCGCACGTCC
51–100	TTATCACCAGGCCTATGAACGTGGTGTGAAGATTATTGGCGCAACCGCTC
101–150	ACTATGTGAATGACAATCTGGACGAAGGCCCAATCATCATGCAGGACGTT
151–200	ATTCATGTCGATCATACCTACACAGCTGAAGATATGATGCGCGCAGGTCG
201–250	TGACGTCGAGAAAAACGTCTTAAGTCGTGCACTATACAAAGTACTGGCAC
251–300	AGCGCGTCTTTGTTTACGGTAATCGGACGATTATTCTTTAATCGCCAGCA
301–350	AAAATAACTGGTTACCTTTAATCCGTTACGGATGAAAATTACGCAACCAG
351–400	TTCATTTTTCTCAACGTAACACTTTACAGCGGCGCGTCATTTGATATGAT
401–450	GCGCCCCGCTTCCCGATAAGGGAGCAGGCCAGTAAAAAGCATTACCCCGT

Downstream homology arm	DNA sequence 5′ → 3′
1–50	TCACTTTCAAAAGTCCCTGAACTCTCAAACGAATCCGTAATTAAATATTC
51–100	TGCCCAAGCGGGGAAGGATGAGAAGCTTCGACCAAGGTTCGACTTGAGCG
101–150	CCAGCGAGAGAGCGTTGCCGCAGGCAACGACCCGAAGGGCGAAGCGCGCA
151–200	GCGCTGAGTAATCCTTCCCCCACCACCATCACTTCCTGAAATACTCAAAA
201–250	CCTGTTACTCCGAGCTAATTTTGCCCGATGGCACCGCGTTTACCGGACCT
251–300	ACAATATCCTCCCCTGTAGGTCGGATAAGCGAAGCGCATCCGACAACTCA
301–350	CCCCGCACCGTGCCCATAAAAAAACCCCGCCGAAGCAGGGTCTATGTGAA
351–400	CTAAAATTCGCTTAGTGACGAGCGCGCACCAACTGATACTTACGTGTCAG
401–450	ATACTCCACCGGTACGCTCCAGATGTGCACCAGACGCGAGAACGGGAACA