

Figure S1: Sequence of HDR dsDNA repair template for *lbk* knock-in.

5' – CAGACGGACTTGGAGGCCAGCAGGATCATTGTCCAGCAAGGACTCGGGCACCGGTTGGA
TGCGGCTGTGAAACGCACTCTGGATGACTTTGAGGTGGCCATGCCAGTCATAAGCATCACACCG
ACGACGAGGAGGAGGAGGAGGTTGAGGAGGTGTATGAAGAAAACGAGCCACCATACATAAAGCAT
ACATACGAAGTGAATTATGCTGAACCCGAGCAGCATCTCTTTCTGCAGAACAACAATCACAAC
CGACGGTGGCGGGATTGGCGTTGCTGGTGGGGTCAACAAAATGGTGCCCAACGCGCTGCTCCGCA
AATGCAGCGCTGGTGCCAGCGGCAGCAACTACAGCTCCATCCAACAGTGCACAACAGTGGACATT
ATGGACTACAAAGACCATGACGGTGATTATAAAGATCATGACATCGATTACAAGGATGACGATGA
CAAGCACCGGTTGAGCTCCGCCACCATGGATCTCCACCGGGTGGAGGCCGCATCTTTTACCCAT
ACGATGTTCTGACTATGCGGGCTATCCCTATGACGTCCCGGACTATGCAGGATCCTATCCATAT
GACGTTCCAGATTACGCTGCTCATGGCGGATGAGCCATCACTTAACCAAATGAGCAGGATGATCA
GGATCATATAACAAAACTGGAGGCTGCACCGTAACCCCAACCGCAGTCCGCCCCAAAACGAAC
ACAAAGACTGTTTAACTCGTAATTATAATTCGTAGATGGTGGCCCAGACTTTTGGACTGGCCACG
ACCATAGAGCAGGCGGCCTTATTGATGCCTTTGCTATGGAAATAGGACAGCTAGAGAAACATACC
AGTGTCTTCGTAATTTATGAAATTAATCGTTAGAATCGATTATCATTAACTTGTAATGCATAATA
TTTAATTATCGTATATGTATATTTATAATTTCTTTTCGCTTGTGATATTATTTATTATTTGATT
GCCCGAGTTTTAGACGTAATACATTCA

The repair template consists of a 225 bp 3xFLAG-3X-HA flanked by 387 and 384 bp *lbk* homology arms (Fig. 1). This repair template was synthesized as a gene block (gB) by Integrated DNA Technologies, Inc., PCR amplified, and cloned into TOPO[®] vector. The gRNA-*lbk2* genomic target is underlined. The 3xFLAG-3xHA epitope tag is blue, the stop codon is red, followed by mutations at the PAM site of two GG changed to CA shown in green text.