Table S1. Primers used in this study

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| Name1 | Primer sequence (5’ – 3’)2 | Function |
| 1N50F | GATGATGATGAT**AAA**GCGGGTGACGGACAGGAT | For expression of Mfa1 and Mfa1 with N-terminal deletion |
| 1N563R | TTAGAGATCAACCTCATAGGAATGAAC |
| 1NS287F | CACCAGTAAAGAGGGCAATGGCC | For expression of precursor Mfa1 |
| 1NS287R | TTAGAGATCAACCTCATAGGAATGAAC |
| 2N29F | GATGATGATGATAAATGTGATAAGATGATTTATGACAATTACG | For expression of Mfa2 |
| 2N324R | TTAAAGTTCTATTTCGTAACTATGTATCAACC |
| 3N44F | GATGATGATGAT**AAA**GCAGCACATACGAATGGC | For expression of Mfa3 |
| 3N446R | CTATTTCTTGATAAAAACTTTATCCGG |
| 4NS290F | CACCAAGAACAATCCTAGCGAGCC | For expression of Mfa4 |
| 4NS290R | TCAAATCTCGACTTCGTACTTGTAC |
| 291NTF | CACCTTTCAAATAAAAGCTCGCCCT | For expression of Mfa5 with C-terminal deletion |
| 291NTR | TTAGTCGAATCCGAACGAAAG |
| 1R543 | TTACGTATCCTGATCAGGCAAGG | For expression of Mfa1 with N-terminal deletion |
| 1F92 | GATGATGATGAT**AAA**GCTGAAGATCTTGATTTTGGC | For expression of Mfa1 with C- terminal deletion |
| MFA1F | GCTTGTGGAGAGTGCTGAAG | For qRT-PCR |
| MFA1R | TTGCCGACAGCAGAATTAAC |
| MFA2F | ATAGATGGGACGACCCTTTG |
| MFA2R | ACACTCACCGTCACACGATT |
| MFA3F | TGGCCTCGATCGTGAACAAA |
| MFA3R | ATTGTTTTCTCCGTCCGGCT |
| MFA4F | TGCTGCCGAAAGGCTCATTA |
| MFA4R | CCAGCCTCGGATTGTGTCAT |
| MFA5F | GGCTTCGATGCGGATAAGGA |
| MFA5R | CTGCCGATTCAACCCACTCT |
| M1NHF | CGATTACATGGATCCTCAGGGTGGCCCTGGG | For placement of aspartic acids in N-terminal Mfa1 |
| M1NHR | CTATCTTTCTCATCTTTGTCTTTTCCTGCCCACTCTCCTAC |
| M1NSF | CTCTTACATGTCTCCTCAGGGTGGCCCTGGG | For placement of serines in N-terminal Mfa1 |
| M1NSR | CTAGATTTCTCAGATTTGTCTTTTCCTGCCCACTCTCCTAC |
| M1NAF | CGCTTACATGGCTCCTCAGGGTGGCCCTGGG | For placement of alanines in N-terminal Mfa1 |
| M1NAR | CTAGCTTTCTCAGCTTTGTCTTTTCCTGCCCACTCTCCTAC |
| M1CHF | TACAGATTTGCCTTGGAAAGTTCATTC | For placement of aspartic acids in C-terminal Mfa1 |
| M1CHR | TCCTCATCCGACATGAACGTATCCTG |
| M1CSF | TACATCTTTGCCTTGGAAAGTTCATTC | For placement of serines in C-terminal Mfa1 |
| M1CSR | GACTCAGACGACATGAACGTATCCTG |
| M1CAF | TACAGCTTTGCCTTGGAAAGTTCATTC | For placement of alanines in C-terminal Mfa1 |
| M1CAR | GCCTCAGCCGACATGAACGTATCCTG |
| M1NBF | GGGTGGCCCTGGGCTTGTGCCAAGTGCTGAAGATCTTGATTTTG | For placement of prolines in N-terminal Mfa1 |
| M1NBR | TGAGGCACCATGTAGATGCTTGGTTTCTCAATTTTGTCTTTTCC |
| M1CBF | CCTTGGAAACCACATTCCTATGAGGTTGATCTC | For placement of prolines in C-terminal Mfa1 |
| M1CBR | CAAAACTGTTGGCTCAACCGACATGAACGTATC |
| RGPAUS\_F | GTTCAGATTGTCCGGCTGGAGAATAGGCAGAC | Generating fragment upstream of *rgpA* for use with allelic exchange mutation |
| RGPAUStet\_R | AGCATTAGAACTTGGCAATAAATTCTGTCTTGGACTCGGAGAC |
| RGPADStet\_F | CTACGTTAAGGAGATAATTCGTTGTGTTTTTCATTTTGATGAAATTAG | Generating fragment downstream of *rgpA* for use with allelic exchange mutation |
| RGPADS\_R | GTCAGAAAAAGCCTTCCGAATCCGACAAAGATAG |
| RGPB US\_F | CTGCCTTTCTATCTGGCCATGTGGATGTGCTAC | Generating fragment upstream of *rgpB* for use with allelic exchange mutation |
| RGPBUSerm\_R | GATGGAGCGGAAACGTAAAAGATTCACACTGCAATTCTCTAATAAG |
| RGPBDSerm\_F | ACGGGCAATTTCTTTTTTGTCATTTGCTTGAATTAGTTTTTTATTTG | Generating fragment downstream of *rgpB* for use with allelic exchange mutation |
| RGPBDS\_R | GAAACCCGAATGGTTGAAAATACGTCTTGGTGGGAATGAG |
| KGPUS\_F | CACATTTCGGTAAGGGAAGGGGTGCTTGTGGATG | Generating fragment upstream of *kgp* for use with allelic exchange mutation |
| KGPUSerm\_R | TGGAGCGGAAACGTAAAAGATTCTGTCTTGGACTCGGAG |
| KGPDSerm\_F | ACGGGCAATTTCTTTTTTGTCATACTTTAAAACAATTTATGGTC | Generating fragment downstream of *kgp* for use with allelic exchange mutation |
| KGPDS\_R | CAGCCGAGGAGCATACGGATATTCGCTTG |
| MFA1usF | CTCAATGTAAAAGGAGAAAAGAAGGTAAGAAGGCTATG | Generating fragment upstream of *mfa1* for use with allelic exchange mutation |
| MFA1usR | ACGGGCAATTTCTTTTTTGTCATAAGCCAAATGTTTAAAAG |
| MFA1dsF | GATGGAGCGGAAACGTAAAAGATTAGCTATTGTAAAATTTTC | Generating fragment downstream of *mfa1* for use with allelic exchange mutation |
| MFA1dsR | CACATCATTGCAACTGCCCTGACGATACTTATG |
| MFA2usF | CAACGAAAGCCCAGAGTTATGAAATTAAAGCCAC | Generating fragment upstream of *mfa2* for use with allelic exchange mutation |
| MFA2usR | GGCAATTTCTTTTTTGTCATTGTTTTAAAAAATATAGAGGGTG |
| MFA2dsF | TGGAGCGGAAACGTAAAAGA GAGAAAAAAGACCGGTTCTTC | Generating fragment downstream of *mfa2* for use with allelic exchange mutation |
| MFA2dsR | CATTGGTTCGTGGCACCTACTCGCCTCAG |
| MFA3usF | GCAGTGCCAA TGTGTTTGAGGATGTCCAGTTG | Generating fragment upstream of *mfa3* for use with allelic exchange mutation |
| MFA3usR | GGCAATTTCTTTTTTGTCATATTCCAAGTGTATATGGTTATAAG |
| MFA3dsF | TGGAGCGGAAACGTAAAAGA ACAGACTTATGAAAAAGTATTTG | Generating fragment downstream of *mfa3* for use with allelic exchange mutation |
| MFA3dsR | GTCCGGCAAAGGCAAGCGATAAAGCTC |
| MFA4usF | CTACCTATGTCTTTACTGTGAAATTGAAACCCGGAC | Generating fragment upstream of *mfa4* for use with allelic exchange mutation |
| MFA4usR | GGCAATTTCTTTTTTGTCATAAGTCTGTCTATTTCTTG |
| MFA4dsF | TGGAGCGGAAACGTAAAAGATATTTTTTAGGTCTTGTTTGATATTG | Generating fragment downstream of *mfa4* for use with allelic exchange mutation |
| MFA4dsR | GAGTTGGATAATTTGGAGTAAGAGGTGTAGATGGATTG |
| MFA5usF | GTGAGACAGTACGCTATGAAAGGAATCAAGGAAG | Generating fragment upstream of *mfa5* for use with allelic exchange mutation |
| MFA5usR | GGCAATTTCTTTTTTGTCATTATTATTACCTCGTTAGTTACTACC |
| MFA5dsF | TGGAGCGGAAACGTAAAAGATAATGTGAAGAAGATGATGC | Generating fragment downstream of *mfa5* for use with allelic exchange mutation |

1 F: forward; R: reverse 2 Enterokinase P1 site is bolded and underlined.