**Table 9: Pseudogene distribution across a panel *Yersinia pestis* and *Y. pseudotuberculosis* strains**

| | *Y. pestis strains* (O, Orientalis; M, Medievalis; A, Antiqua) | | | | | | | | | | | | | *Y. pseudotuberculosis strains* (Serovars I through V) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | O | O | O | O | O | M | M | M | M | A | A | A | A | I | I | I | I | II | V | III | III | IV | | |
| IP32953 gene | CO92 | 297RR | Hambourg10 | Exu184 | 6/69 | KIM10+ | PKH-4 | PKR292 | PAR13 | Harbin | Japan | Margaret | 343 | IP32953 | IP33134 | IP32790 | IP32950 | IP30215 | IP32952 | IP32802 | IP32889 | IP31833 | Assigned category | Primer 1 | Primer 2 |
| YPTB0105 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | *Y. pestis* -specific | TGTAACCGGTGCTGCGTTTG | GCAGACACCACCATGAGATCGC |
| YPTB0261 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CTGCAACCTGCTGGACGATATG | GCTTGGCAGCACAGACTTTGG |
| YPTB0269 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AGCAAGCTGCGCATAGTCACAC | CGATTCTTTGTTGGCTCCTTGG |
| YPTB0436 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CACCCTCAATCAATCCAGCCTG | TTGCCTCTTCGCAGCCATTC |
| YPTB0524 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AACACCGCTAATGCCGCTAACC | TTTCTGGATCTGCTTCAGCGAC |
| YPTB0761 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AACCACACTCGCGTTTCAGACC | GAGCGTGTCAGTTGGGCATTG |
| YPTB0839 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CGTTATTAGCGCCCTTCACGAC | ATAACGGCACCGGCGATCAG |
| YPTB1059 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TGTAACGGCACAGAGCATCAGC | ACTCACGAAACGGCGTTCAAC |
| YPTB1073 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AAACCGGTCCATCTCGATCTTG | AGCGACAAAGTGTTCCCATTCC |
| YPTB1123 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | ATGATAACGCTGACCAACACCG | GGCCGTTGGCTGAATCACTG |
| YPTB1202 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CAGCCTCTCCGGATTTGAATTG | ATCAAAGGCGCAACCATAGACC |
| YPTB1236 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GAGCAACCAAAGTCGTACGTGG | GGGATGTTCGGGTGAGCTTTC |
| YPTB1259 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TAGGCGTTCATCGGTGAGAATG | ACCGATTTGCAACAACAGCATG |
| YPTB1668 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GAGAACGGTTGGCTGTACGGAC | TGTGCGTTCACCTGATAAACCTG |
| YPTB2097 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TCACCCGTGAGCAGCATGATC | ACCACTGGCCTTGCTGCTTATC |
| YPTB2120 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | ATGATGCTCACCGCTCGCAG | TCCACCAAATTCAGGATACGCC |
| YPTB2169 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CCTGCGATTAGCGGCAATATC | GTAATTCGTCATGGCTGGCAAG |
| YPTB2170 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TTTACGGGCCAAAGCACACAG | GCTCCCTCATGGCTTCAGATTG |
| YPTB2661 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TCGCGACAATGAGGAAACCAC | ATTATTGGAAGCGGCACAGCC |
| YPTB2668 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TCCCGCCAATAGGTATGCTGAC | ATCCGGCGATTGTCCAAGG |
| YPTB2826 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TCCAGTTGGGAAGGCTACATGG | TGAGACCTTGCTGGCCGATTC |
| YPTB2962 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TTGCCGTTTCAACGAGTCAGTG | TGACCATTCTCCACCACCAGC |
| YPTB3269 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CAAGCTACAGAGGTGCTGGCTG | AGCGCCCAATGCTGTGTACC |
| YPTB3389 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | ATATGCTGCGCTGCCAGTCC | GTAACCGCCGTTGACGATCC |
| YPTB3489 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TAGCATCGACCGCTTACTGGG | AATCGAGGTGGTAAAGTGCATCG |
| YPTB3527 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AACCCTGCCAAGCCATTAAGC | TGCAATGCTGGATCGTTGGTC |
| YPTB3545 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CGGTAACGCGCCTTACATCG | GCACCGAACCTTCACGACCTAG |
| YPTB3654 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GAAACCCAAGGCAGCCACAC | AACCTTGCTTGCGGATCAGC |
| YPTB3837 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TTGGGTTGAGACGCCAGGTATC | CCGATGGCACTTGTGATGTCTG |
| YPTB3895 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AAGCGGTTGCCGTAATTGAGC | TTGCCGGATACCGTTTCTCTG |
| YPTB0915 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | Orientalis-specific | CGGATGCCATACGCGATACTC | TCCTTGAGGCTTACCCTGTGGG |
| YPTB0990 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TGCGATGGGTCAATAACTGGC | GGTTGGCAGTGGTATTGGGAAC |
| YPTB1367 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GATGTTATCCGGGCGCACAG | TTTGCAGCCTCAGCCACCTAC |
| YPTB2400 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AGCTAAAGGCGGAGAACTGACG | GCGTGGCCAATGATTGCTG |
| YPTB3031 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TGCTCAGCGCTATCAGGCTACC | GCAGAGCTGGCATCATTACCG |
| YPTB3336 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | ATGACCGCCCAGCGTAACTATC | CGGGATGATCGCTATCGTGC |
| YPTB3782 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | AAGCGCTGTTTCGAACATTCAGAG | ATGCCGGGCGCAGATGAG |
| YPTB0668 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | only in Orientalis and some Antiqua | CCTCAATGCTGATGTGGACGTG | ACTCATCCTACCGCCAGCTGAC |
| YPTB1068 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GCATTGGTGCCGTTAACTTGC | AGCAACTGACGCTGCCAGAAG |
| YPTB1165 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TGATTAAAGCGGGCCTGGAAC | CCCAACTGGCGTGCCATTAG |
| YPTB2011 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GCGCAGGAAAGCATTCAAGC | CAGTGAATTGGTCGGTCAAGGG |
| YPTB2308 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | GGGCTGAACCAGCTTAGGCATC | GAAGTTCATCAGCCGTTGTCCC |
| YPTB2951 | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | ACGTCATTTAAGGTTTCTTTACGCC | TGGATGAGGTTATGCTCAGATTTCG |
| YPTB2355 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | M | M | wt | M | wt | in some *Y. pseudotuberculosis* | TGGGAAGCGTTAGGCAATGG | AACGTAAATAGCGGCAAATGCG |
| YPTB3178 | M | M | M | M | M | M | M | M | M | M | M | M | M | wt | wt | wt | wt | M | wt | M | wt | wt | | GGCCTAATGTTCCCGATACCG | ATGGCGGGTGTAACCAACTAGC |
| YPTB3731 | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | CO92-specific | CAGCAGGGTGAAACGTTGTGG | GATATCCGGCGTCACACCATG |
| YPTB0090 | M | wt | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | not assigned | CAATTTGCTCTTCGGAAGCCTG | GGCCTGACAGTGAATTTACCCG |
| YPTB0164 | M | M | M | M | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TTTATGCTGCCATCGATCTTGG | AACTTGCCAGCCATGTTCACG |
| YPTB0870 | M | M | M | M | M | M | M | M | M | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TGCGCCCTGAACTGTGGTAAAC | CCACAATTCGCCGAACAGATTC |
| YPTB2601 | M | wt | M | M | wt | M | M | M | M | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TTAGCCGTCAGTGCTGAAGTCG | TTTGCCGAAACTCTTCTGTGCC |
| YPTB3846 | M | wt | M | M | M | M | M | M | M | wt | wt | M | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | | CACCATCATAAACCCGCAATGC | GGCACGTCAAATCTGGTTACCG |
| YPTB3932 | M | M | M | M | M | wt | M | wt | wt | M | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | wt | | TGACATTGCGCCAGATGCTC | CACTGACGAAGCCGGTCATTG |

**M : Mutant allele**
wt : Wild type allele