**Appendix I. Results of IS6110 real-time PCR and target amplicon sequencing for all samples successfully sequenced**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Specimen** | **phenotypic DST** | **TB-NGS DST profile** | **rpoB** | **katG** | **inhA** | **mabA** | **furA** | **embB** | **ubiA** | **pncA** | **rpsA** | **gyrA** | **gyrB** | **rpsL** | **rrs** | **eis** | **tlyA** | **rrl** | **rplC** | **Coverage** | **IS6110 Ct before purification** | **IS6110 Ct after purification** | **Coverage** |
| MTBCR-01 | INH, RIF, EMB, STR, FQs | INH, RIF, EMB, STR, FQs | **S531L (97.05%)** | **S315T (98.19%)** | WT | WT | WT | **M306V (98.19%)** | WT | WT | WT | **D94G (98.39%)** | WT | **K43R (98.52%)** | WT | WT | WT | WT | WT | 49 | 8.65 | 7.16 | 3313 |
| MTBCR-02 | INH, RIF, EMB | INH, RIF, EMB | **S531L (97.81%)** | WT | WT | **c-15t (99.28%)** | WT | **M306I (98.19%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 68 | 6.12 | 3.8 | 4413 |
| MTBCR-03 | INH, RIF, STR, FQs | INH, RIF, STR, FQs | **I572F (98.4%)** | WT | WT | **c-15t (99.29%)** | WT | WT | WT | WT | WT | **D94A (94.1%)** | WT | **K88R (97.56%)** | WT | WT | WT | WT | WT | 50 | 16.33 | 14.26 | 3292 |
| MTBCR-04 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 65 | 5.16 | 3.4 | 4300 |
| MTBCR-05 | INH | INH | WT | **S315T (98.4%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 61 | 6.01 | 3.58 | 3939 |
| MTBCR-06 | RIF, STR | RIF, STR | **L533P (98.67%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | **K43R (98.49%)** | WT | WT | WT | WT | WT | 68 | 4.93 | 3.52 | 4415 |
| MTBCR-08 | All suceptible | INH | WT | **S315T (37.04%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 24 | 24.41 | 21.78 | 2491 |
| MTBCR-09 | INH, EMB, AMI, KAN, CAP | INH, EMB, AMI, KAN, CAP | WT | WT | WT | **c-15t (98.36%)** | WT | **M306V (98.24%)** | WT | WT | WT | WT | WT | WT | **a1401g (93.38%)** | WT | WT | WT | WT | 47 | 15.67 | 14.21 | 2960 |
| MTBCR-10 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 58 | 17.14 | 15.36 | 3823 |
| MTBCR-11 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 54 | 7.29 | 5.34 | 3470 |
| MTBCR-13 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 62 | 8.49 | 6.66 | 3991 |
| MTBCR-14 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 58 | 7.2 | 4.59 | 3674 |
| MTBCR-15 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 60 | 7.45 | 5.46 | 3867 |
| MTBCR-16 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 44 | 23.05 | 20.87 | 2926 |
| MTBCR-17 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 35 | 19.36 | 17.26 | 2891 |
| MTBCR-18 | STR | STR | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | **K43R (98.75%)** | WT | WT | WT | WT | WT | 42 | 15.87 | 13.33 | 2695 |
| MTBCR-19 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 61 | 11.55 | 10.23 | 3918 |
| MTBCR-20 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 59 | 8.44 | 6.93 | 3772 |
| MTBCR-21 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 6 | 23.59 | 21.41 | 2504 |
| MTBCR-22 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 42 | 7.85 | 6.52 | 2761 |
| MTBCR-23 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 44 | 13.49 | 10.49 | 2916 |
| MTBCR-24 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 56 | 6.27 | 4.2 | 3674 |
| MTBCR-25 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 50 | 9.83 | 8.29 | 3203 |
| MTBCR-26 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 10 | 20.47 | 17.89 | 1731 |
| MTBCR-27 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 44 | 18.11 | 16.18 | 3003 |
| MTBCR-28 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 27 | 17.52 | 16.12 | 1906 |
| MTBCR-29 | INH, STR | INH, STR | WT | **S315N (97.43%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | **K43R (98.53%)** | WT | WT | WT | WT | WT | 33 | 12.47 | 10.99 | 2397 |
| MTBCR-30 | INH, EMB, AMI, KAN, CAP | INH, EMB, AMI, KAN, CAP | WT | WT | WT | **c-15t (99.29%)** | WT | **M306V (98.08%)** | WT | WT | WT | WT | WT | WT | **a1401g (98.88%)** | WT | WT | WT | WT | 68 | 16.22 | 14.78 | 4288 |
| MTBCR-31 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 69 | 8.55 | 7.23 | 4367 |
| MTBCR-32 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 50 | 12.64 | 9.58 | 3106 |
| MTBCR-33 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 63 | 23.43 | 22.07 | 3866 |
| MTBCR-34 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 41 | 23.73 | 21.09 | 2892 |
| MTBCR-36 | INH, RIF, EMB, STR | INH, RIF, EMB, STR | **S531L (97.69%)** | **S315T (98.58%)** | WT | WT | WT | **M306I (98.31%)** | WT | WT | WT | WT | WT | **K43R (98.66%)** | WT | WT | WT | WT | WT | 54 | 7.91 | 5.59 | 3437 |
| MTBCR-37 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 47 | 6.93 | 5.04 | 2771 |
| MTBCR-38 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 55 | 6.9 | 5.52 | 3317 |
| MTBCR-39 | INH, EMB, AMI, KAN, CAP | INH, EMB, AMI, KAN, CAP | WT | WT | WT | **c-15t (99.37%)** | WT | **M306V (98.36%)** | WT | WT | WT | WT | WT | WT | **a1401g (99.19%)** | WT | WT | WT | WT | 42 | 15.45 | 12.99 | 2621 |
| MTBCR-40 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 45 | 26.28 | 23.45 | 2852 |
| MTBCR-41 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 49 | 13.98 | 10.75 | 2944 |
| MTBCR-42 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 55 | 7.62 | 5.37 | 3335 |
| MTBCR-43 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 59 | 13.64 | 11.35 | 3661 |
| MTBCR-44 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 19 | 27.86 | 25.42 | 1903 |
| MTBCR-45 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 48 | 20.1 | 17.07 | 2880 |
| MTBCR-46 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 50 | 21.23 | 19.23 | 3088 |
| MTBCR-48 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 53 | 14.08 | 11.26 | 3384 |
| MTBCR-49 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 21 | 15.73 | 14.1 | 1511 |
| MTBCR-50 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 59 | 6.51 | 5.15 | 3633 |
| MTBCR-51 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 44 | 17.41 | 14.4 | 2862 |
| MTBCR-52 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 15 | 20.08 | 18.63 | 1276 |
| MTBCR-53 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 53 | 19.63 | 17.4 | 3124 |
| MTBCR-54 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 42 | 8.49 | 6.08 | 2640 |
| MTBCR-56 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 58 | 7.64 | 5.02 | 3447 |
| MTBCR-57 | INH, RIF, STR, FQs | INH, RIF, STR, FQs | **I572F (98.04%)** | WT | WT | **c-15t (99.16%)** | WT | WT | WT | WT | WT | **D94A (94.05%)** | WT | **K88R (97.6%)** | WT | WT | WT | WT | WT | 64 | 8.94 | 6.05 | 3851 |
| MTBCR-58 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 56 | 8.13 | 5.28 | 3352 |
| MTBCR-59 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 58 | 10.68 | 8.56 | 3594 |
| MTBCR-60 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 64 | 12.02 | 9.22 | 3871 |
| MTBCR-61 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 24 | 23.95 | 22.53 | 2002 |
| MTBCR-62 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 51 | 19.62 | 16.78 | 2543 |
| MTBCR-63 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 43 | 9.79 | 6.51 | 2690 |
| MTBCR-66 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 48 | 14.1 | 12.37 | 3053 |
| MTBCR-67 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 69 | 8.67 | 7.3 | 4160 |
| MTBCR-68 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 45 | 11.63 | 9.93 | 2729 |
| MTBCR-69 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 59 | 18.25 | 16.34 | 3600 |
| MTBCR-70 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 30 | 25.06 | 21.66 | 2383 |
| MTBCR-71 | All suceptible | All suceptible | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 22 | 19.87 | 17.38 | 1674 |
| MTBCR-72 | INH, RIF, EMB, STR | INH, RIF, EMB, STR | **S531L (97.08%)** | **S315T (97.77%)** | WT | WT | WT | **M306I (98.03%)** | WT | WT | WT | WT | WT | **K43R (98.06%)** | WT | WT | WT | WT | WT | 57 | 8.58 | 5.85 | 3435 |
| MTBCR-73 | INH | INH | WT | **S315N (98.27%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 31 | 17.5 | 15.43 | 2333 |
| MTBCR-74 | INH | INH | WT | **S315T (97.52%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 32 | 16.9 | 13.52 | 2478 |
| MTBCR-75 | INH | INH | WT | **S315T (98.4%)** | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | WT | 43 | 16.53 | 14.59 | 3345 |
| MTBCR-76 | INH, STR | INH, STR | WT | WT | WT | **g-17t (99.57%)** | WT | WT | WT | WT | WT | WT | WT | **K43R (98.25%)** | WT | WT | WT | WT | WT | 37 | 18.55 | 15.78 | 3139 |