**Table S1.**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Populus trichocarpa* SOD gene nomenclature** | **Locus** | **Forward (5’→3’)** | **Reverse(5’→3’)** |
| *PtCCS1* | *POPTR\_0001s08330*  | GCCAGAAGTGCAGGAGTTGG | CAGTGAACAGAGTAAAACAAACACAGAG |
| *PtCCS2* | *POPTR\_0003s11830*  | GCCAGAAGTGCAGGAGTTGG | CAATGGCTGAACATGGTGC |
| *PtCSD1.1* | *POPTR\_0005s04590*  | CTGTTGGTGATGATGGCACT | ACTATGGCGGTGCTGTGG |
| *PtCSD1.2* | *POPTR\_0013s03160*  | CTGTTGGTGATGATGGCACT | GGCTTTCATATTTTTATTCAGAATCTATC |
| *PtCSD2.1* | *POPTR\_0009s01050*  | ACTGGGAATGCAGGTGGA | CCTGATAGTATTACTTTACACACTGAGAA |
| *PtCSD2.2a* | *POPTR\_0011s01280*  | CACTGAGTGGTCCAAATGCA | CACATGGGAAAATTAACATTAACATTA |
| *PtCSD2.2b* | *POPTR\_0004s22620*  | as for *PtCSD2.2a* | as for *PtCSD2.2a* |
| *PtCSD3.1* | *POPTR\_0019s05140*  | AGACAACTGGGAATGCAGGT | CAGTTTCGAACAAGTATATTGGATC |
| *PtCSD3.2* | *POPTR\_0013s05350*  | AGACAACTGGGAATGCAGGT | GCACAAGTGTGTTGGACGAG |
| *PtMSD1* | *POPTR\_0019s08540*  | CAAGCACACCTGCTCTGCA | TTTCCATAGTTTCGATACACCAGTAA |
| *PtMSD2* | *POPTR\_0013s09270*  | GGTGAAGTTTATGACAAAGAAAGC | TAACATCCAACGAACCACGG |
| *PtFSD2.1* | *POPTR\_0015s12190*  | TGGTGTCATGGGATGCAG | AAGACAACGAAGGACGTGACA |
| *PtFSD2.2* | *POPTR\_0012s11400*  | CACATCAACTTCCATGGAGAA | CCGATGCCTGGATATTCATG |
| *PtFSD3* | *POPTR\_0005s09190*  | GCAGAGGCATTCGTGAATCT | CCAACATGACTGCATTTCTACC |
|  |  |  |  |
| ***Arabidopsis thaliana* SOD gene nomenclature** | **Locus** |  |  |
| *AtCCS* | *AT1G12520* |  |  |
| *AtCDS1* | *AT1G08830* |  |  |
| *AtCSD2* | *AT2G28190* |  |  |
| *AtCSD3* | *AT5G18100* |  |  |
| *AtMSD* | *AT3G10920* |  |  |
| *AtFSD1* | *AT4G25100* |  |  |
| *AtFSD2* | *AT5G51100* |  |  |
| *AtFSD3* | *AT5G23310* |  |  |