**Supporting Table 1: Primers used in this study**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Specificity**  | **Direction** | **Sequence (5`-> 3`)** | **Purpose of use or reference** |
| **AK59** | *comB* |  | gga att cga aga aca tca taa gcg ttt | verification of deletion of *comB*-system |
| **AK65** | *comB* |  | cag aat tcc aat act tca acg gac ttt  | deletion of *comB6-10* |
| **D9355** |  |  | ccg gat ccg tga tgc ggt gcg | RAPD-PCR primer, Akopyanz et al. 1992 |
| **DHO10** | *comB* |  | ggg gta ccc tta aaa atg ccc aat taa a  | downstream *comB10* |
| **DHO11** | *comB* |  | cca tcg atc aaa tga tcg ctt ggc gt  | downstream *comB10* |
| **DHO14** |  |  | ccg ctc gag gtc gac tca ctt caa aaa ctc agc | amplification*comB* internal |
| **DHO15** | *comB* |  | gaa gat ctc aaa aag ggt aaa gat g | verification of deletion of *comB*-system  |
| **HH64** | *rpsL-erm* |  | cag c ggatcc at gct tta taa cta tgg att | amplification of *rpsL-erm* cassette (*Bam*HI) |
| **HH66** | *rpsL-erm* |  | gc ggatcc t tac tta tta aat aat tta tag | amplification of *rpsL-erm* cassette (*Bam*HI) |
| **HP519** | *cag*-PAI |  | gct tgc ttg tat tgg cct tg  | sequence flanking *cag*-PAI  |
| **HP549** | *cag*-PAI |  | gca tgc aca ttc cct aaa gtg  | Sequence flanking *cag*-PAI |
| **JP22** | *cag*-PAI |  | ggg gta cct tac ctt acc ggc ttt att aat g  | *cag*-PAI deletion |
| **JP23** | *cag*-PAI |  | gga gat cta agg atc tga cat gtt ta | *cag*-PAI deletion |
| **JP24** | *cag*-PAI |  | gaa gat cta tcg att att tta tta gcg tta c | *cag*-PAI deletion |
| **JP25** | *cag*-PAI |  | acc gct cga gct gca gcc caa gaa ttc aaa cga c  | *cag*-PAI deletion |
| **LH33** | *comB6-10* | sense | taa gag aag cgt taa gcg cg | verification deletion *comB6-10* |
| **LH34** | *comB6-10* | antisense | gag cgt ttc atc tac taa gg | verification deletion *comB6-10* |
| **SR4** | *orf4C, orf04* | sense | act gat tac ata ttc gta ata ata ttt | sequencing of deletion of *orf4C* or *orf04* |
| **SR5** | *orf4C, orf04* | antisense | aga aat cag caa tca att aga aca ac | sequencing of deletion of *orf4C* or *orf04* |
| **SR13** | Tfs4 | sense | gat cct cga gct tct aaa tct ttg cta aat | deletion of Tfs4 (XhoI) |
| **SR14** | Tfs4 | antisense | gat cat cga taa gcc caa tga aga agt gt | deletion of Tfs4 (ClaI) |
| **SR17** | Tfs3 | sense | gat cct cga gct aaa ctc tgg cgt aaa att | deletion of Tfs3 (XhoI) |
| **SR18** | Tfs3 | antisense | gat cat cga tgt ccc ttt cta tga gac tta g | deletion of Tfs3 (ClaI) |
| **SR22** | Tfs4 | sense | aca cca agt ttg tta aat ac | sequencing deletion *tfs4* |
| **SR24** | Tfs3 | sense | gag cgt ctt tga aat gcg tt | sequencing deletion *tfs3* |
| **SR25** | Tfs3 | antisense | tct cta tca gtg tca gtg gc | sequencing deletion *tfs3* |
| **SR28** | Tfs4 | sense | gat cgc ggc cgc cat tct tat tcc ttt atg tt | deletion of *tfs4* (NotI) |
| **SR30** | Tfs3 | sense | gat cgc ggc cgc aca caa agc acc caa agt ta | deletion of *tfs3* (NotI) |
| **SR32** | Tfs4 | sense | gat cgc ggc cgc cat taa gac tta aat tag ga | deletion of *tfs4* (NotI) |
| **SR34** | Tfs4 | antisense | gat ccc gcg gat aat ctc caa att tta gag | deletion of *tfs4* (SacII) |
| **SR35** | Tfs3 | antisense | gat ccc gcg gca ctt tca tac tat att taa | deletion of *tfs3* (SacII)  |
| **SR42** | *rpsL-erm* | sense | cag cat cga tat gct tta taa cta tgg att | amplification of *rpsL-erm-*cassette (ClaI) |
| **SR43** | *rpsL-erm* | antisense | gcg gta cct tac tta tta aat aat tta tag | amplification of *rpsL-erm*-cassette (KpnI) |
| **SR48** | *Tfs4* |  | gat cct cga gta ttg gtg ggc att gcc aat | amplification*tfs4* internal |
| **SR49** | *Tfs4* |  | gat cat cga tta ttt atc cga gtg ttt atc | amplification*tfs4* internal |
| **SR53** | *cat*GC | sense | gat cgg atc ccc tac agg tct cac aca tca | catGC-cassette between *orf01* and *orf11* in pHel12 (BamHI) |
| **SR54** | *cat*GC | antisense | gat cgg atc ccc aaa ctt tcc cta tgg gca | catGC-cassette between *orf01* und *orf11* in pHel12 (BamHI) |
| **SR59** | *aphA-3* | antisense | gat cgt cga cag cga acc att tga ggt gat ag | cloning of *aphA-3* cassette from pHel3 (SalI) |
| **SR60** | *aphA-3* | sense | gat cgg tac ccg ggg atc ttt tag aca tct | cloning of *aphA-3* cassette from pHel3 (KpnI) |
| **SR73** | *cat*GC | sense | gag ctg gtg ata tgg gat ag | sequencing primer within catGC-cassette |
| **SR74** | *cat*GC | antisense | ctc cag agc gat gaa aac gt | sequencing primer within catGC-cassette |
| **SR79** | *orf12M* | antisense | gat cgg atc ctt tgt cct agt atc taa att | deletion of *orf12M* (BamHI) |
| **SR80** | *orf12M* | sense | gat cgg atc cca gat gca tgc taa cta gac | deletion of *orf12M* (BamHI) |
| **SR99** | *orf4M* | sense | ctc gag gtg tta tct aca aaa tct ac | amplification of *orf4M* from pHel4 (XhoI) |
| **SR100** | *orf4M* | antisense | gtc gac gct gat ttt ttg aca gaa aaa t | amplification of *orf4M* from pHel4 (SalI) |
| **SR105** | *orf12M* | sense | gat cga atc cgt gat gga tta taa aga att | amplification of *orf12M* (EcoRI) |
| **SR106** | *orf12M* | antisense | gat cgt cga cgc tga ttt ttt gac aga aaa at | Amplification of *orf12M* (SalI) |
| **WS542** | *Tfs3* |  | acg cct cga gca tat gga ctt aga caa act caa ag | amplification*tfs3* internal |
| **WS355** | *Tfs3* |  | acc ggt cga caa att gca ttt tca tgc g | amplification*tfs3* internal |
| **WS418** |  |  | acc ggt cga cta aaa aac att tca tat ctc | amplification*cag-PAI* internal |
| **Hp542f** |  |  | ggg gat ccg tcg acc cga tct tag ggt att aac | amplification*cag-PAI* internal |
|  |  |  |  |  |