| Location on T7.1 (Genome Position) | Nature of Difference | Probable Reason for Difference | Expected Outcome | | | |
|---|--|---|--|--|--|--|
| D1L (164-170), D1R & D2L (338- 350) | Restriction sites were not added in construction | Difficulties in manipulating left end of genome resulted in using wild-type | Loss of manipulability in part 1 (containing A0) | | | |
| gene 0.4 (1418) | Single base deletion | Unknown | Frameshift after 27 th amino acid followed by early termination of gene 0.4 | | | |
| D6L (1304-1310) D6R (1494-1500) | Restriction sites appear twice. | Inefficiency of digestion of scaffold | No expected change | | | |
| gene 0.6B | Single base addition | Error is known to be in stock of wild-type genome | Dependent upon nature of putative translational slippage in formation of gene 0.6B | | | |
| D11L (3302-3307) | Restriction site appears twice | Inefficiency of digestion of scaffold | No expected change | | | |
| gene 1 (4877) | Single base mutation | Error in PCR or within wild-type genome | Silent mutation, no expected change | | | |
| gene 1 (5159) | Single base mutation | Error in PCR or within wild-type genome | Silent mutation, no expected change | | | |
| gene 1 (5399) | Single base mutation | Error in PCR or within wild-type genome | Silent mutation, no expected change | | | |
| D14R (6591-6597) | Restriction site appears twice | Inefficiency of digestion of scaffold | No expected change | | | |
| TE (7827) | Single base deletion | Primer synthesis error | Possible loss of function of transcriptional terminator. | | | |
| D20L (8082-8086) | Restriction site appears twice | Inefficiency of digestion of scaffold | No expected change | | | |
| U4 (8153-8159) | Restriction site was not added in construction | Failure in site-directed mutagenesis | Loss of manipulability of overlap in parts 18 and 19 | | | |
| D22L (8247-8253) | Restriction site appears twice | Inefficiency of digestion of scaffold | No expected change | | | |

Table S1. Errors in synthesis & construction of section alpha

| Location on T7.1 | Nature of Difference | Probable Reason for Difference | Expected Outcome |
|----------------------------|-----------------------------|---|--|
| gene 1.7 (8794) | Single base silent mutation | Error during PCR or within wild-type genome | No expected change |
| gene 1.8 (9245) | Single base mutation | Error during PCR or within wild-type genome | Amino acid change in gene 1.8 from Asp to Gly |
| gene 2.0 (9447) | Single base mutation | Error during PCR or within wild-type genome | Amino acid change in gene 2.0 from Glu to Val |
| gene 2.5 (10351) | Singe base deletion | Error during primer design | deletion in stop codon; read- through adding on 8AA |
| gene 2.8 (10627) | Single base mutation | Error during PCR | Amino acid change in gene 2.8 from Asp to Gly |
| gene 2.8 (10717- 10803) | 82 base deletion | Error in cloning of part | Loss of function in gene 2.8 in addition to unknown effect on translation of 3.0 due to read- through |
| gene 3.0 (10926) | Single base silent mutation | Error during PCR or within wild-type genome | No expected change |

| Table | S2. | Errors | in | synthesis | & | construction | of | section | beta |
|-------|-----|--------|----|-----------|---|--------------|----|---------|------|
|-------|-----|--------|----|-----------|---|--------------|----|---------|------|