

Supplementary File – Design of Experiments

Table D1. PCR primers for LCR part preparation.

Table D2. Bridging oligonucleotides for LCR assembly of plasmids.

Figure D1-D18. Combinatorial design of experiments for DE13, DE22, DE27, DE28, DE31, DE32, DE33, DE35, DE36, DE37, DE38, DE39, DE40, DE42, DE45, DE46, DE47, and DE49.

Table D1. PCR primers for LCR part preparation.

| Primer Name | Primer sequence (5'-3') | PCR target ID | PCR target | Design |
|-------------|--|---------------|-------------------------|---------------------|
| SBC000314_F | /5Phos/CGACGCGTCTAACTACCAGCC | SBC000091 | Gene part: HaTAL | DE38 |
| SBC000314_R | /5Phos/GTCGCGCTTTGGTAAAGTATAGAATTTGATCAGC | SBC000091 | Gene part: HaTAL | DE38 |
| SBC000318_F | /5Phos/CGACGCGTCTAACTACCAGCC | SBC000095 | Gene part: FjTAL | DE38 |
| SBC000318_R | /5Phos/GTCGCGCTTTGGTAAAGTATAGAATTTGATCAGTTGTAA | SBC000095 | Gene part: FjTAL | DE38 |
| SBC000323_F | /5Phos/CAGAGCTAAAACAAACAGTAAATACCAGGAATTAATATATAAGGAGGTAA | SBC000100 | Gene part: Gm4CL3 | DE40 |
| SBC000323_R | /5Phos/AATGGTGTAGCTGGAGATTTCTCGGG | SBC000100 | Gene part: Gm4CL3 | DE40 |
| SBC000329_F | /5Phos/CAAACCTACCTCCGCTGTATCAGGA | SBC000106 | Gene part: EcCMPDH(fbr) | DE13,DE35 |
| SBC000329_R | /5Phos/TCACTGACGGTTGTCAATGGCTTGG | SBC000106 | Gene part: EcCMPDH(fbr) | DE13,DE35 |
| SBC000330_F | /5Phos/ACAGGAACTCAGCCTCGTCCACATT | SBC000107 | Gene part: EcDAHPS(fbr) | DE13,DE35 |
| SBC000330_R | /5Phos/TTAACTCGACGGCCCTTAACGG | SBC000107 | Gene part: EcDAHPS(fbr) | DE13,DE35 |
| SBC000331_F | /5Phos/TGCACTTTACGAAGCCAGCC | SBC000108 | Gene part: EcPEPS | DE13,DE35 |
| SBC000331_R | /5Phos/TTACTTCTCAGTTCGGAAGGCTCAGC | SBC000108 | Gene part: EcPEPS | DE13,DE35 |
| SBC000332_F | /5Phos/TTTAGAACAGACAGTTCGGCGGAGCT | SBC000109 | Gene part: EcTKT | DE13,DE35 |
| SBC000332_R | /5Phos/TTATAAGATTTCTTTGCTTTGGCAACCACGTTGTCTA | SBC000109 | Gene part: EcTKT | DE13,DE35 |
| SBC004731_F | /5Phos/GGTCTCTCACTGAAGGATGAGCGAAAACG | SBC004554 | Gene part: RsTYR2 | DE39 |
| SBC004731_R | /5Phos/TTATTAATAACTGCAACTCGATCGATTCTGGGGTCAAC | SBC004554 | Gene part: RsTYR2 | DE39 |
| SBC004733_F | /5Phos/TCTGACTTCTCAGCCAGGCTTCC | SBC004555 | Gene part: PpDODC | DE22 |
| SBC004733_R | /5Phos/TTATTAGCCTTAATGACGCTCTCGCAGACGTG | SBC004555 | Gene part: PpDODC | DE22 |
| SBC004734_F | /5Phos/TTGACCTCGTCGATTCAATGATAATGTACTTCACTC | SBC004560 | Gene part: MIMAO | DE22 |
| SBC004734_R | /5Phos/TTATTAGCTCGAATATCGCGCAGCACATC | SBC004560 | Gene part: MIMAO | DE22 |
| SBC004735_F | /5Phos/TGCGGCAGTGTAAAAGCAAAAATCACCC | SBC004582 | Gene part: MIMAO2 | DE22 |
| SBC004735_R | /5Phos/TTAGCTGTTGGTTGCCGGC | SBC004582 | Gene part: MIMAO2 | DE22 |
| SBC004913_F | /5Phos/TTTAAAAGCCGACCGATCGCGGT | SBC004800 | Gene part: PpXylM | DE30 |
| SBC004913_R | /5Phos/CGCCCTGCTCCACTAACCAATACGA | SBC004800 | Gene part: PpXylM | DE30 |
| SBC004914_F | /5Phos/GTGCTCTTCCATGATTGGTGATCCGG | SBC004803 | Gene part: PpXylA | DE30 |
| SBC004914_R | /5Phos/GGAGAGGGCAGTATACTGCTTTAGGTGTGA | SBC004803 | Gene part: PpXylA | DE30 |
| SBC004915_F | /5Phos/AGGTCGGGGTATCAATCCAGTCG | SBC004804 | Gene part: PpXylC | DE30 |
| SBC004915_R | /5Phos/AGCGCAATCAGGTTCCCTTCTCAGTTAAATG | SBC004804 | Gene part: PpXylC | DE30 |
| SBC004918_F | /5Phos/GAACATGTCAACGTGAGTATACAACCAACAGTAAAC | SBC004825 | Gene part: PcALDH1 | DE30 |
| SBC004918_R | /5Phos/CAGTACCTATAGATGCTGTCCCGCTT | SBC004825 | Gene part: PcALDH1 | DE30 |
| SBC004923_F | /5Phos/GTTCCGTTTGGACCTTGAACG | SBC004837 | Gene part: SgAXylM | DE30 |
| SBC004923_R | /5Phos/AGTTAGTTATCCCTCTAATATGGCCGATCCTTAAAGT | SBC004837 | Gene part: SgAXylM | DE30 |
| SBC004924_F | /5Phos/CGTTATATCTCTTTTTGTCGGTCCAGTTCAGAAC | SBC004838 | Gene part: SpAXylA | DE30 |
| SBC004924_R | /5Phos/CTCAACCTAGCTAAAGCAGCCCGG | SBC004838 | Gene part: SpAXylA | DE30 |
| SBC004981_F | /5Phos/AGGATCAAATATGAACAGGGTACGGGGTC | SBC004979 | Gene part: CtTsaD | DE30 |
| SBC004981_R | /5Phos/CACTGCGCAATACACTTCTACGACATGAA | SBC004979 | Gene part: CtTsaD | DE30 |
| SBC006440_F | /5Phos/GGAATCGTCTGTCTTGCCACTTCAATT | SBC006423 | Gene part: CtTsaC | DE30 |
| SBC006440_R | /5Phos/CGAACTAAAAGTATCTTGACGAGCGTTAGAAATGTTA | SBC006423 | Gene part: CtTsaC | DE30 |
| SBC006924_F | /5Phos/GTTGGAGATGCGGGTCTCAGCATACTT | SBC006881 | Gene part: EcPAO | DE22 |
| SBC006924_R | /5Phos/TTATTTATCTTTTAAAGGGCACCTAATGTCCGGG | SBC006881 | Gene part: EcPAO | DE22 |
| SBC006926_F | /5Phos/CGGGGCATGCGAGACTGC | SBC006883 | Gene part: MsCOMT1 | DE39 |
| SBC006926_R | /5Phos/TCAACCTCTTCCAGAAATCCATAATGTAGGTGTTAAAGG | SBC006883 | Gene part: MsCOMT1 | DE39 |
| SBC006930_F | /5Phos/AATGCTGACTTTGTGCAACCTCTCTATAAGGAC | SBC006912 | Gene part: ScDODC | DE22 |
| SBC006930_R | /5Phos/TCAGCTTTTCCACGACCTTCACTG | SBC006912 | Gene part: ScDODC | DE22 |
| SBC006931_F | /5Phos/CAGGACTTCCGATCCTTACATGTGA | SBC006913 | Gene part: SsDODC | DE22 |
| SBC006931_R | /5Phos/TCAGCTTTTGTATCTGCTTACCTCC | SBC006913 | Gene part: SsDODC | DE22 |
| SBC007152_F | /5Phos/GCCTACTTGGTTCGCCCTCA | SBC007151 | Gene part: LpCOMT | DE39 |
| SBC007152_R | /5Phos/TCACTTGGTAAATCAATCGCCAGGC | SBC007151 | Gene part: LpCOMT | DE39 |
| SBC007154_F | /5Phos/ACGCCCTGTACAATGGTTCCAG | SBC007153 | Gene part: SbCOMT | DE39 |
| SBC007154_R | /5Phos/TTATTTGATAAACTCAATAGCCACGCGTTCGCATAAAT | SBC007153 | Gene part: SbCOMT | DE39 |
| SBC007156_F | /5Phos/AGAGCCGAAAAGCAAGTTGTTCTCAAC | SBC007155 | Gene part: PkCOMT1 | DE39 |
| SBC007156_R | /5Phos/TTAGGCCTTCTGCAAACTCGATGACATG | SBC007155 | Gene part: PkCOMT1 | DE39 |
| SBC007158_F | /5Phos/CTATCGGATTGCTAGTTCGCGTACC | SBC007157 | Gene part: PdCOMT1 | DE39 |
| SBC007158_R | /5Phos/TTAATTTTTCTTAAAGAAATCAATAACGTAGGTATTGAAGGCAGAGCAAGC | SBC007157 | Gene part: PdCOMT1 | DE39 |
| SBC007160_F | /5Phos/CCCCAACCCATCCATGACCC | SBC007159 | Gene part: AoHMAS | DE31 |
| SBC007160_R | /5Phos/TTAGCGCCGGCTGAC | SBC007159 | Gene part: AoHMAS | DE31 |
| SBC007162_F | /5Phos/CAGTCTGATGGAAGCGGGC | SBC007161 | Gene part: StHMAS | DE31 |
| SBC007162_R | /5Phos/TCATTGCGCGGGCCAC | SBC007161 | Gene part: StHMAS | DE31 |
| SBC007164_F | /5Phos/TACTCCAAGAGCATAAGCCGC | SBC007163 | Gene part: SwHMAS | DE31 |
| SBC007164_R | /5Phos/TTAGAGAGAATCTTCTGGTGGCCAGAC | SBC007163 | Gene part: SwHMAS | DE31 |
| SBC007166_F | /5Phos/GTTCTTCTCATGTAATTTGCGCGATGTTTTCAAT | SBC007165 | Gene part: SvHMAS1 | DE31 |
| SBC007166_R | /5Phos/TCACGCCGGTGTGCCTTG | SBC007165 | Gene part: SvHMAS1 | DE31 |
| SBC007168_F | /5Phos/GCCGCAAGGGGAAAGCTGTTAAAGAG | SBC007167 | Gene part: SpHMAS | DE31 |
| SBC007168_R | /5Phos/TTAACTTAGGGCTCCTGCTTTAGCACGC | SBC007167 | Gene part: SpHMAS | DE31 |
| SBC007170_F | /5Phos/AGACACCGTGGCCGC | SBC007169 | Gene part: SchMAS1 | DE31 |
| SBC007170_R | /5Phos/TCAACGCGGGCGGTCC | SBC007169 | Gene part: SchMAS1 | DE31 |
| SBC007172_F | /5Phos/TTAAATTAGGGATATAAAGCTCTTATCTGATGCTTCCATTTG | SBC007171 | Gene part: SyHMAS | DE31,DE32,DE46,DE49 |
| SBC007172_R | /5Phos/TTAGTGTCTCTCCGGTGGCCGC | SBC007171 | Gene part: SyHMAS | DE31,DE32,DE46,DE49 |
| SBC007174_F | /5Phos/TTTTTCTGCACACTCCGACACCC | SBC007173 | Gene part: SsHMAS | DE31 |
| SBC007174_R | /5Phos/TCAGGCTAAATCCTGCGCTTACAGC | SBC007173 | Gene part: SsHMAS | DE31 |
| SBC007176_F | /5Phos/AGCCCGTGGATACGCCA | SBC007175 | Gene part: AbHMAS | DE31 |
| SBC007176_R | /5Phos/TTATGCTGCGCTAGAGCCCGG | SBC007175 | Gene part: AbHMAS | DE31 |
| SBC007178_F | /5Phos/ATCTTATGGTAATGTGAACAAACCCGACGCTCG | SBC007177 | Gene part: SchMAS2 | DE31 |
| SBC007178_R | /5Phos/TTACGACGCGCGCTTTG | SBC007177 | Gene part: SchMAS2 | DE31 |
| SBC007180_F | /5Phos/TAGGAGGATCGCCACATACGCCA | SBC007179 | Gene part: NuHMAS | DE31 |
| SBC007180_R | /5Phos/TTAGCGTTCTGTGCGGTGGCG | SBC007179 | Gene part: NuHMAS | DE31 |
| SBC007182_F | /5Phos/TACGCTGGCCTCAGAGGAG | SBC007181 | Gene part: SvHMAS2 | DE31 |
| SBC007182_R | /5Phos/TTATCCGCCACTTCGGAGGC | SBC007181 | Gene part: SvHMAS2 | DE31 |
| SBC007184_F | /5Phos/TGTGCTAGCAGGTCGATAGTAGCCG | SBC007183 | Gene part: ScADH1 | DE22 |
| SBC007184_R | /5Phos/TTACTTGAAGGTATCAACACGTAACGACCT | SBC007183 | Gene part: ScADH1 | DE22 |
| SBC007186_F | /5Phos/GAGGGCGGCAATATGTGATGATTTCCG | SBC007185 | Gene part: PpXYLB | DE22 |
| SBC007186_R | /5Phos/TTAGCAAATGCGCAGGACCCG | SBC007185 | Gene part: PpXYLB | DE22 |
| SBC007188_F | /5Phos/AGCGGCTGAGTGGGGT | SBC007187 | Gene part: BrBADH | DE22 |
| SBC007188_R | /5Phos/TTAAGACATACGTACGATGTTAATAGTACGACCGGT | SBC007187 | Gene part: BrBADH | DE22 |
| SBC007190_F | /5Phos/CCATTTTCGAGATGTTTATAGTGCACITTTCA | SBC007189 | Gene part: PaAreB | DE22 |
| SBC007190_R | /5Phos/TTATTTACCGGCAGCTAGTCTGGATCG | SBC007189 | Gene part: PaAreB | DE22 |
| SBC007192_F | /5Phos/TCCCAAATGCTGGGGCGC | SBC007191 | Gene part: BzAADH | DE22 |

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|-------------|--|-----------|-------------------------|------|
| SBC007192_R | /5Phos/TCAATTCATCCTCAGGACCGTTTGACTG | SBC007191 | | DE22 |
| SBC007194_F | /5Phos/GTTTCCGAAAACAGTGGGAGTGATATGG | SBC007193 | Gene part: PsBADH | DE22 |
| SBC007194_R | /5Phos/TTAAATGCACGAACCGTTGGGTTCAAACAG | SBC007193 | | DE22 |
| SBC007196_F | /5Phos/CCCGAATGGGGAGATCATATAAGTCAATACGTA | SBC007195 | Gene part: PpHAL | DE37 |
| SBC007196_R | /5Phos/TCACAAGGAAGGTAGAACCAGCCAGC | SBC007195 | | DE37 |
| SBC007198_F | /5Phos/TTCTTCTACATCGATGTTCCGAACTACACAGAC | SBC007197 | Gene part: YpHAL | DE37 |
| SBC007198_R | /5Phos/TCACAGACTGGGCGAGAAAGTTTCGC | SBC007197 | | DE37 |
| SBC007200_F | /5Phos/GATGATATCTCTAGCAGAGCAGAGTGAAGGG | SBC007199 | Gene part: LpHAL | DE37 |
| SBC007200_R | /5Phos/TTATTCATTGGTCCAGGGTAAATAGGCTAAACTCCTGTG | SBC007199 | | DE37 |
| SBC007202_F | /5Phos/CAGTTCCAAGATCCATTCACCATCAACG | SBC007201 | Gene part: BIHAL | DE37 |
| SBC007202_R | /5Phos/TTACTGCTCACTCGGAAGCTAAAAGGG | SBC007201 | | DE37 |
| SBC007204_F | /5Phos/AGGGCTGTGACAGCAGCTGC | SBC007203 | Gene part: SgHAL | DE37 |
| SBC007204_R | /5Phos/TCATGCAAGTGGTCCGTTACCG | SBC007203 | | DE37 |
| SBC007216_F | /5Phos/AGACACTGTCTAGCCGTTCAAAACACATCG | SBC007215 | Gene part: AnFDC | DE45 |
| SBC007216_R | /5Phos/TCAATGGGAGAAACCATCTTTGTCCAATTGTCC | SBC007215 | | DE45 |
| SBC007218_F | /5Phos/CCCGTGGCTGTAACGCTAGTAC | SBC007217 | Gene part: ScFDC | DE45 |
| SBC007218_R | /5Phos/TTATTTATAGCCGTAGCGCTCCAGTTTTCATTCACT | SBC007217 | | DE45 |
| SBC007220_F | /5Phos/TTTGATAGGGTTTCGTGCGCCAC | SBC007219 | Gene part: CdFDC | DE45 |
| SBC007220_R | /5Phos/TCATTTGTAGTATTTGTCGAGTTTGGGAGATTTTATTCTGACT | SBC007219 | | DE45 |
| SBC007222_F | /5Phos/TGCGATGCCGCTCCTAAACG | SBC007221 | Gene part: BsFDC | DE45 |
| SBC007222_R | /5Phos/TTACAGGCGTCCGGCACGT | SBC007221 | | DE45 |
| SBC007224_F | /5Phos/CATTATGGGCACAGGCACTCAGTGGAAATAT | SBC007223 | Gene part: EsFDC | DE45 |
| SBC007224_R | /5Phos/TTATTTAGATTTGTCGCGGAAGTTTTCGCTAGTTC | SBC007223 | | DE45 |
| SBC007238_F | /5Phos/TGTGAGTTTACCTGAACCGGCTTG | SBC007237 | Gene part: AtCAD | DE40 |
| SBC007238_R | /5Phos/TCAGGCATCCAGGTTGGAACCTTC | SBC007237 | | DE40 |
| SBC007240_F | /5Phos/GAGTAAGGTAATGTAGTTATCGCAGTGTGAGTTTCTC | SBC007239 | Gene part: PsCAD | DE40 |
| SBC007240_R | /5Phos/TTACACGTATGCTAGCTAAGCCACCGCTCG | SBC007239 | | DE40 |
| SBC007242_F | /5Phos/TCACATTTCCAGCAGGCTATG | SBC007241 | Gene part: ZmCAD | DE40 |
| SBC007242_R | /5Phos/TTAGTTGCTGGCGGCTCTGC | SBC007241 | | DE40 |
| SBC007244_F | /5Phos/AGAGAGGACCGCTATCACACAAGTGG | SBC007243 | Gene part: PtCAD | DE40 |
| SBC007244_R | /5Phos/TTAAGGTTTTGTCGCTGCCAGTGTATTACCC | SBC007243 | | DE40 |
| SBC007246_F | /5Phos/TTGGAAACGATGCGGTGGAAATCAGC | SBC007245 | Gene part: ScCAD | DE40 |
| SBC007246_R | /5Phos/TCAATCAGAAAATTCCTGTCAAAACCGACGAGGG | SBC007245 | | DE40 |
| SBC007248_F | /5Phos/GCTGGCTTGTATCGTGGCAC | SBC007247 | Gene part: PhCFAT | DE42 |
| SBC007248_R | /5Phos/TTAGTACGTTGCGGTCAAATCTAGGTAGCAC | SBC007247 | | DE42 |
| SBC007250_F | /5Phos/TAGTCCATAATAGTTGGCTTAAAAATCTGCTCAAACATCG | SBC007249 | Gene part: VcCFAT | DE42 |
| SBC007250_R | /5Phos/TTAGATCGCACTACAATGAAGACGGACTTG | SBC007249 | | DE42 |
| SBC007252_F | /5Phos/GTTTCTTAGCAGCGCAGAGTTTCGC | SBC007251 | Gene part: FaCFAT | DE42 |
| SBC007252_R | /5Phos/TCAGCCAATCATCTTCTAGCTCTTGCTG | SBC007251 | | DE42 |
| SBC007254_F | /5Phos/CACTGCGCCGACGCTTCA | SBC007253 | Gene part: MdCFAT | DE42 |
| SBC007254_R | /5Phos/TTACTGGCTAGTAGACCGTAAATATTGCAAATATCTTCCTTCG | SBC007253 | | DE42 |
| SBC007266_F | /5Phos/CCCTCTATGGTAACATCTCAGATGCGTTTCG | SBC007265 | Gene part: PhEGS1 | DE42 |
| SBC007266_R | /5Phos/TCACGCAAAGTGGCTAGATATCTCTACG | SBC007265 | | DE42 |
| SBC007268_F | /5Phos/TCCGATCTTCCCTAACCGTTTCGTCTTC | SBC007267 | Gene part: CbEGS1 | DE42 |
| SBC007268_R | /5Phos/TTACTCAAATCCGCAAGGTTGCGC | SBC007267 | | DE42 |
| SBC007270_F | /5Phos/TGTCTAGTATCGGATCATATTATCAAATGCTAATTAGGACCTA | SBC007269 | Gene part: ObEGS1 | DE42 |
| SBC007270_R | /5Phos/TCAAAACGACGCGAAGCCG | SBC007269 | | DE42 |
| SBC007272_F | /5Phos/TTGTTGTGGACCTCCGTTGGATGG | SBC007271 | Gene part: CbEGS2 | DE42 |
| SBC007272_R | /5Phos/TTAGACAACTGATCCAGATATCTTCCACCGTGG | SBC007271 | | DE42 |
| SBC007274_F | /5Phos/GACGGGTAATCCGTTTCATTTCCGTTTTCAA | SBC007273 | Gene part: PvCCR1 | DE40 |
| SBC007274_R | /5Phos/TTACGCGCAATCGCAATTGCCA | SBC007273 | | DE40 |
| SBC007276_F | /5Phos/CTCCCAACATTTGCTCCGTCTC | SBC007275 | Gene part: PhCCR1 | DE40 |
| SBC007276_R | /5Phos/TCAGGGTTGGATGCGAATGATCGGTT | SBC007275 | | DE40 |
| SBC007278_F | /5Phos/ACGAATCCGAAATGGGCGTAAAGA | SBC007277 | Gene part: MtCCR1 | DE40 |
| SBC007278_R | /5Phos/TCAAGATTTAACGGCCAGGCTATCTTTATTAGGAATAGAC | SBC007277 | | DE40 |
| SBC007280_F | /5Phos/TGTCCATTCGATCTTCCCTGACCTGC | SBC007279 | Gene part: MtCCR2 | DE40 |
| SBC007280_R | /5Phos/TTAAGCACTATCTCTGATGGGTGGA | SBC007279 | | DE40 |
| SBC007282_F | /5Phos/GAATATAGGGTGGCCACAAGCATCTCT | SBC007281 | Gene part: AtCCR1 | DE40 |
| SBC007282_R | /5Phos/TTACGAGCCGATTTGATACCATTTTCTACGCTTTC | SBC007281 | | DE40 |
| SBC007284_F | /5Phos/GCTTTGCGGAGCTGCAATATTGCT | SBC007283 | Gene part: ZmCCR2 | DE40 |
| SBC007284_R | /5Phos/TTAGCTCTTCCAAGCTGATCATGATCCTGTTTG | SBC007283 | | DE40 |
| SBC007286_F | /5Phos/GGGGACTGCGCTCATATAGGGG | SBC007285 | Gene part: PaUbiX | DE45 |
| SBC007286_R | /5Phos/TTACTCATCAGACCAAAATGCTGTTCCGCC | SBC007285 | | DE45 |
| SBC007288_F | /5Phos/TGGCCAGAAGCGGATACCAAGATATTAAT | SBC007287 | Gene part: EcUbiX | DE45 |
| SBC007288_R | /5Phos/TCAGGCGCCTGCCAACG | SBC007287 | | DE45 |
| SBC007290_F | /5Phos/GGGCGGAAAGCAGAAATGTCGGAT | SBC007289 | Gene part: DrUbiX | DE45 |
| SBC007290_R | /5Phos/TTAGGCTCATCTCGCGCCAG | SBC007289 | | DE45 |
| SBC007292_F | /5Phos/AGGCTGTTGTAAGCTGGCCACC | SBC007291 | Gene part: RpUbiX | DE45 |
| SBC007292_R | /5Phos/TCAGTCACTTACACAGGCTTAACTCAAATGGTTTTT | SBC007291 | | DE45 |
| SBC007294_F | /5Phos/CCCTGGGTAAGGTAAGATTAAGACGGGTC | SBC007293 | Gene part: ScUbiX | DE45 |
| SBC007294_R | /5Phos/TTACCCCGTGGGGCGC | SBC007293 | | DE45 |
| SBC007302_F | /5Phos/ATCTCTCGTCCGAATCTCCGGGCA | SBC007301 | Gene part: PhPAAS | DE22 |
| SBC007302_R | /5Phos/TTACGATTTAATCATCTGTAGCATGATTGCGCAC | SBC007301 | | DE22 |
| SBC007304_F | /5Phos/GTCGAGCTTCTTCTGAGCCCTG | SBC007303 | Gene part: PcPAAS | DE22 |
| SBC007304_R | /5Phos/TTAACTCAACCTTCAACAGTTTATTGAAAGTAAAGGATCATCTAACAGC | SBC007303 | | DE22 |
| SBC007306_F | /5Phos/TCTGAGACCCTAGTCAAACATTTAGCTGATTG | SBC007305 | Gene part: PsPAAS | DE22 |
| SBC007306_R | /5Phos/TTACGCAACCAGCTGTCTACGAC | SBC007305 | | DE22 |
| SBC007308_F | /5Phos/GAACCGAGGTAACATTCGATCAGCGAT | SBC007307 | Gene part: AcPAAS | DE22 |
| SBC007308_R | /5Phos/TTAGAAGTGGCCAGAATAGATCAGGC | SBC007307 | | DE22 |
| SBC007312_F | /5Phos/GGCGATTGCTCGGTGGGG | SBC007311 | Gene part: JrTDC | DE22 |
| SBC007312_R | /5Phos/TTAATAATTCTCGCTTAAAGATTGCAATCGCGTGTCTTGA | SBC007311 | | DE22 |
| SBC007314_F | /5Phos/ACATACCTCGTCTCTGATACATCAT | SBC007313 | Gene part: OeTDC | DE22 |
| SBC007314_R | /5Phos/TTAGCTCATGGACAGCAACCGTTG | SBC007313 | | DE22 |
| SBC007332_F | /5Phos/AGTAGTTTGCCTCCAGTTGGCGTA | SBC007331 | Gene part: EcDAHPS(fbr) | DE35 |
| SBC007332_R | /5Phos/TTACGCGACGCGAGCTGTAAGTTG | SBC007331 | | DE35 |
| SBC007334_F | /5Phos/TCTGGGGTATGCACAACTCTG | SBC007333 | Gene part: EcCMPDH(fbr) | DE35 |
| SBC007334_R | /5Phos/TCAGGTGCGATCAACGGGGAC | SBC007333 | | DE35 |
| SBC007336_F | /5Phos/AAAGGATATAAGTATGACCCGAAGGACCTTTGATG | SBC007335 | Gene part: PsTYDC2 | DE22 |
| SBC007336_R | /5Phos/TTAAGATGAGAAGTCAAGCTCACTGAATTTGCT | SBC007335 | | DE22 |
| SBC007338_F | /5Phos/AAACAACAAGCGTACCTATAGGAGGTACATATCC | SBC007337 | Gene part: BsOXDA | DE28 |
| SBC007338_R | /5Phos/TTATTTGGCGTAAACATAATCCAATGCTGATCCGG | SBC007337 | | DE28 |
| SBC007340_F | /5Phos/GCCATAGTATCTGTAATCTGTAATAGCAGAGCTTCC | SBC007339 | Gene part: BsOXDB | DE28 |

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|-------------|---|-----------|-----------------------|----------|
| SBC007340_R | /5Phos/TCAGAACTCTGCCAGTTCCGCGC | SBC007339 | | DE28 |
| SBC007342_F | /5Phos/AAACTTTTCTATCTAGCGTTCTATAACAATGACTATCCGACAG | SBC007341 | Gene part: ChoXDAB | DE28 |
| SBC007342_R | /5Phos/TTAATAATACTGCAATTCCTTAACTTATCTCTGAATAGCTTTCCACGGG | SBC007341 | | DE28 |
| SBC007344_F | /5Phos/TTACAGCGCATCATTGGACGTGGC | SBC007343 | Gene part: HsOXDA | DE28 |
| SBC007344_R | /5Phos/TTATTTATCAAATGGTCCAGTGGGTAGTGTCCACCA | SBC007343 | | DE28 |
| SBC007346_F | /5Phos/CAGGTGCTGCTGAGTTCGTTCCG | SBC007345 | Gene part: HsOXDB | DE28 |
| SBC007346_R | /5Phos/TCAATAGTTTATCATTTTACGAAAGAGCATCGTAGCATTTCCATTTGT | SBC007345 | | DE28 |
| SBC007348_F | /5Phos/TATCTCAATAATAACACGTCGGTAATATGCGGGAGGTTGA | SBC007347 | Gene part: TtOXDA | DE28 |
| SBC007348_R | /5Phos/TTAAAGCTCTCTTAAAGTAATGCTTCTTGACGCAGC | SBC007347 | | DE28 |
| SBC007350_F | /5Phos/GCGATTCCAGATAAATGACTCTGATCGTCGG | SBC007349 | Gene part: TtOXDB | DE28 |
| SBC007350_R | /5Phos/TTAATAATCTAGCGCAGTTTCGCCGATTAAGAATA | SBC007349 | | DE28 |
| SBC007352_F | /5Phos/CGCGAGTAGATGTATATTATCCGTAAGCCC | SBC007351 | Gene part: BvAKDE1 | DE28 |
| SBC007352_R | /5Phos/TTAGAACTCCGCAAGCTCACGCATG | SBC007351 | | DE28 |
| SBC007354_F | /5Phos/TCTACTTGTATTCCAGGGTCGGAAGTCC | SBC007353 | Gene part: PpAKDBeta | DE28 |
| SBC007354_R | /5Phos/TTATACCTCCATAACCTTCTCAGCGCCG | SBC007353 | | DE28 |
| SBC007356_F | /5Phos/GCTTGGCTGGATACCTCAGCACG | SBC007355 | Gene part: PfACLB | DE28 |
| SBC007356_R | /5Phos/TTACAGAATCATACGAGCATCAACGCAATCG | SBC007355 | | DE28 |
| SBC007358_F | /5Phos/AAGCAGATGCACACCCACCGAC | SBC007357 | Gene part: PfACLA | DE28 |
| SBC007358_R | /5Phos/TCATTTTTCTTTATGTTTTCTTCCACTACTCCATTTGTATAAGGCA | SBC007357 | | DE28 |
| SBC007360_F | /5Phos/TGATGAGTACTACTCGGGTCATAGCATCAC | SBC007359 | Gene part: GiACS | DE28 |
| SBC007360_R | /5Phos/TTAGTGGCTCAACGTAATTTAAAGTCCACAGC | SBC007359 | | DE28 |
| SBC007362_F | /5Phos/GGATTGGGCGAGTCGTAACCGGA | SBC007361 | Gene part: MjACL | DE28 |
| SBC007362_R | /5Phos/TCATTTGATAATCCGCGCATCACCAATGCA | SBC007361 | | DE28 |
| SBC007364_F | /5Phos/AAGACTCTGGCAACTCTCCCTCCATG | SBC007363 | Gene part: AfACL | DE28 |
| SBC007364_R | /5Phos/TTATGACTGTATCCGGGCTTTCGCGT | SBC007363 | | DE28 |
| SBC007410_F | /5Phos/CCACCGCTGCAATGCGACAG | SBC007409 | Gene part: SchMO | DE32 |
| SBC007410_R | /5Phos/TTAGCCGTGAGAAGCATCACGATGAGG | SBC007409 | | DE32 |
| SBC007412_F | /5Phos/ACCTGGGTCGTAGCAACCAACAC | SBC007411 | Gene part: PaHMO | DE32 |
| SBC007412_R | /5Phos/TTACGATGTGTTCTTTACCAATAGATGATCCACAG | SBC007411 | | DE32 |
| SBC007414_F | /5Phos/CGAGGTCTACCGCTCCATC | SBC007413 | Gene part: PpHMO(Sol) | DE32 |
| SBC007414_R | /5Phos/TCACGCGTGTGTCCTTACC | SBC007413 | | DE32 |
| SBC007416_F | /5Phos/CAGACCATACAAGAGATACCCATGTTGTATGAAACGGTATTT | SBC007415 | Gene part: RgDMD | DE32 |
| SBC007416_R | /5Phos/TTACGCGCGCTGAAGGTGCA | SBC007415 | | DE32 |
| SBC007418_F | /5Phos/CATATGTGTATCCGTTGATGGACACT | SBC007417 | Gene part: EfDMD | DE32 |
| SBC007418_R | /5Phos/TCATTTACATTAAGTGAATCTTCTTAGCGTGGACGAG | SBC007417 | | DE32 |
| SBC007420_F | /5Phos/GAACAATAAGAGCCTGCTGATTGGTT | SBC007419 | Gene part: PpMR | DE46 |
| SBC007420_R | /5Phos/TTACACAAGATATTTGCCAATCTCTTTTACGCCAGAT | SBC007419 | | DE46 |
| SBC007422_F | /5Phos/CCATAAACTCACAATGTTGCTCTGATATAATGTCACCT | SBC007421 | Gene part: EcCPL | DE33 |
| SBC007422_R | /5Phos/TCAATAACAAGGTGAGGCCGGAAGGAAC | SBC007421 | | DE33 |
| SBC007424_F | /5Phos/TAGGTTGTTATTTGAAACCAGGACAATGACATGGGTTT | SBC007423 | Gene part: PaHBH | DE33 |
| SBC007424_R | /5Phos/TTATTCATCTCTCATAAGGTAAACCAACGTAATCTCCGCAA | SBC007423 | | DE33 |
| SBC007426_F | /5Phos/CCTCACGCTCTCATCTACAGGACCTG | SBC007425 | Gene part: CgDHS | DE33 |
| SBC007426_R | /5Phos/TTAGTTGGGATTCCGCTTCCAG | SBC007425 | | DE33 |
| SBC007428_F | /5Phos/GGATGTGATTAAATCGATGGCGGGG | SBC007427 | Gene part: KpPDC | DE33 |
| SBC007428_R | /5Phos/TCATTTGCACTGCTGCTGTTCTTTT | SBC007427 | | DE33 |
| SBC007430_F | /5Phos/GGACTTCCCGATCGCGATGGA | SBC007429 | Gene part: PpCDO | DE33 |
| SBC007430_R | /5Phos/TTAGCCTTCTGCAACGACGCG | SBC007429 | | DE33 |
| SBC007433_F | /5Phos/TATGGAGTTTTTGTGCGAAGCCTGCTAGAG | SBC007432 | Gene part: LkKDC | DE28 |
| SBC007433_R | /5Phos/TTACGACTTATTCTGTTCTGCAACAGCTTGCC | SBC007432 | | DE28 |
| SBC007435_F | /5Phos/TACTTACTCAAATGCTCCTACCATGCGGATCCC | SBC007434 | Gene part: CmKDC | DE28 |
| SBC007435_R | /5Phos/TTAGCTATTTGTTTTGCGAACAACCTTTGCCCAA | SBC007434 | | DE28 |
| SBC007437_F | /5Phos/GACTCAAGCGCGGTTTCCG | SBC007436 | Gene part: EhKDC | DE28 |
| SBC007437_R | /5Phos/TTAGCTATTTTGTGCAAAAATCTTCCGCGAGTTTCTGTAGC | SBC007436 | | DE28 |
| SBC007439_F | /5Phos/CAAAGGATTGATCGTCTCTGCC | SBC007438 | Gene part: LkKDC | DE28 |
| SBC007439_R | /5Phos/TTATTTATTTGTTCTGCAAAATTTGCCATTTCTTAAGCAGTTTCG | SBC007438 | | DE28 |
| SBC007441_F | /5Phos/TGCTGCGAGAAAATCCGGAAGG | SBC007440 | Gene part: CdKDC | DE28 |
| SBC007441_R | /5Phos/TTAAGAATTTGCTTGGCAAAAATTTCCCTAATTCATAAGCAGTTCCAG | SBC007440 | | DE28 |
| SBC007448_F | /5Phos/GGTAAGAAAGAGCGCGACAAGGAG | SBC007447 | Gene part: EcYQHD | DE28 |
| SBC007448_R | /5Phos/TTAACGAGCGCTCGTAAATTCGGC | SBC007447 | | DE28 |
| SBC007450_F | /5Phos/AAGACTTACCAATCCATATGGGAGAGATGAGG | SBC007449 | Gene part: StOHD | DE28 |
| SBC007450_R | /5Phos/TCACCAAAATGGCTCTTTAAGCAGTTCC | SBC007449 | | DE28 |
| SBC007452_F | /5Phos/GGGTAGTCTGTGCTTTGGGAAAGT | SBC007451 | Gene part: SaOHD | DE28 |
| SBC007452_R | /5Phos/TTAAGAGATTTATGTTCTTCCAGGAGCTTCAATATAGGTAC | SBC007451 | | DE28 |
| SBC007454_F | /5Phos/ACCGCGAAATGGTCTGACTG | SBC007453 | Gene part: SpOHD | DE28 |
| SBC007454_R | /5Phos/TTAAATGAGATTGCGATCTTTAAGAGTTCTTCAATAAAGATATCCTTAATTTCTTATGACCG | SBC007453 | | DE28 |
| SBC007456_F | /5Phos/CCCGACTCGTCTCAGTATTCCGGA | SBC007455 | Gene part: HfOHD | DE28 |
| SBC007456_R | /5Phos/TCAGATGAGATGATACCTCTGAAGCAGCTCC | SBC007455 | | DE28 |
| SBC007458_F | /5Phos/GCTATATTGGAATGCTCAAAAACGCCGAAGA | SBC007457 | Gene part: StOHD | DE28 |
| SBC007458_R | /5Phos/TCATGCACCAAGTTTTCAGTTTATCACGGAC | SBC007457 | | DE28 |
| SBC007460_F | /5Phos/AGATTTGTTACCTAAATATAGGCCATAGACGTGGA | SBC007459 | Gene part: MeOHD | DE28 |
| SBC007460_R | /5Phos/TTACTTCTGCGACTTCAGGTAACCGCG | SBC007459 | | DE28 |
| SBC007462_F | /5Phos/CGGTTATGCGATTGTTGGTGGTGA | SBC007461 | Gene part: BsOHD | DE28 |
| SBC007462_R | /5Phos/TTATAAAGCTCGCTCTTTTCCAGCAGATCATAGATAAATGGTG | SBC007461 | | DE28 |
| SBC007464_F | /5Phos/CAGTTACGTTTGGTGTCCACGAGTTTC | SBC007463 | Gene part: NhOHD | DE28 |
| SBC007464_R | /5Phos/TTAAACTAAATGATACTATGAAAGCATGCCCGATCTG | SBC007463 | | DE28 |
| SBC007466_F | /5Phos/GATGGTCCCTAATCCCTAAACCC | SBC007465 | Gene part: CbOHD | DE28 |
| SBC007466_R | /5Phos/TTAAATCAGACCTCCATGGACGTATCTTTAAGTAGTTTCTTATTATTGTTTC | SBC007465 | | DE28 |
| SBC007468_F | /5Phos/AGATGTGCGAATAGAACACATGAACGACATATAAAGGAAC | SBC007467 | Gene part: EclLVB | DE27 |
| SBC007468_R | /5Phos/TTACTCGCTACCATTTCCGGTGTGGC | SBC007467 | | DE27 |
| SBC007470_F | /5Phos/CGTTAGTACGAACTATCACCTGACTAGTTGGTTGG | SBC007469 | Gene part: EclLVN | DE27 |
| SBC007470_R | /5Phos/TTACTGGAAGAAAACGGGATTTTATTGAACATGGTTC | SBC007469 | | DE27 |
| SBC007472_F | /5Phos/GGCGTGAGACGCTGAGC | SBC007471 | Gene part: EclLVC | DE27 |
| SBC007472_R | /5Phos/TCAACCGGCAACAGCGATGC | SBC007471 | | DE27 |
| SBC007474_F | /5Phos/TCCCGTCAACAGATTGAGGTAAAAACTAATTGCC | SBC007473 | Gene part: EclLVD | DE27 |
| SBC007474_R | /5Phos/TTAGCCACCCAGTTTCGATTTATCACGCA | SBC007473 | | DE27 |
| SBC004711_F | GGATCCAACTCGAGTAAGGATCTCCAGG | SBC004600 | Plasmid part: ColE1 | Backbone |
| SBC004711_R | GCTTGGACTCCTGTTGATAGATCCAGTAATGAC | SBC004600 | | Backbone |
| SBC004712_F | GGATCCAACTCGAGTAAGGATCTCCAGG | SBC004601 | Plasmid part: p15A | Backbone |
| SBC004712_R | GCTTGGACTCCTGTTGATAGATCCAGTAATGAC | SBC004601 | | Backbone |
| SBC004713_F | GGATCCAACTCGAGTAAGGATCTCCAGG | SBC004602 | Plasmid part: BBR1 | Backbone |
| SBC004713_R | GCTTGGACTCCTGTTGATAGATCCAGTAATGAC | SBC004602 | | Backbone |
| SBC004714_F | GGATCCAACTCGAGTAAGGATCTCCAGG | SBC004603 | Plasmid part: SC101 | Backbone |

| | | | | |
|-------------|---|-----------|----------------------------|----------|
| SBC004714_R | GCTTGGACTCCTGTTGATAGATCCAGTAATGAC | SBC004603 | | Backbone |
| SBC004715_F | GAGCTCGTAAACTTGGTCTGACAGTTACCAATG | SBC004604 | Plasmid part: AmpR | Backbone |
| SBC004715_R | AGGTGGCACTTTTCGGGGAAATGTG | SBC004604 | | Backbone |
| SBC004716_F | GAGCTCTCGAACCCACAGTCC | SBC004605 | Plasmid part: KanR | Backbone |
| SBC004716_R | GGAATTGCCAGCTGGGGCG | SBC004605 | | Backbone |
| SBC004717_F | GAGCTCGATACAAATTACGCCCGC | SBC004606 | Plasmid part: CamR | Backbone |
| SBC004717_R | GATATCTGGCGAAAATGAGACGTTGATCGGC | SBC004606 | | Backbone |
| SBC004718_F | GACGTCGACACCATCGAATGGTGC | SBC004607 | Plasmid part: lacI-Ptrc | Backbone |
| SBC004718_R | CTTCTTAAAGATCTTTTGAATTCTGAAATTGTTATCCGCTCACAAATCC | SBC004607 | | Backbone |
| SBC004719_F | GACGTCTTAAGACCCACTTTCACATTTAAGTTGTTTTCT | SBC004608 | Plasmid part: tetR-Ptet | Backbone |
| SBC004719_R | CTTCTTAAAGATCTTTTGAATTCTTTCTATCACTGATAGGGAGTGGTA | SBC004608 | | Backbone |
| SBC004720_F | GACGTCGGTGCCTAATGAGTGAGC | SBC004609 | Plasmid part: lacI-PlacUV5 | Backbone |
| SBC004720_R | CTTCTTAAAGATCTTTTGAATTCTGAAATTGTTATCCGCTCACAAATCC | SBC004609 | | Backbone |
| SBC004724_F | ATAGTTCCTTACGATAGCCGCCCT | SBC000088 | Plasmid part: Ptrc | Backbone |
| SBC004724_R | CGTCTTCGCTTCCCTACGGC | SBC000088 | | Backbone |
| SBC004725_F | GCCAGGGATTGGGCTCAACTTCTAC | SBC000124 | Plasmid part: Ptrc2 | Backbone |
| SBC004725_R | GCCTGCGTTTACCGTGAGGC | SBC000124 | | Backbone |
| SBC004726_F | CAGCGGGCTCCTACCTATTGTG | SBC000125 | Plasmid part: Ptrc3 | Backbone |
| SBC004726_R | CTCACGCAGCGCCAGACAGTA | SBC000125 | | Backbone |
| SBC004796_F | GTAGCCTCTGATGTATAAAGGGTTCGGT | SBC004788 | Plasmid part: Ptrc4 | Backbone |
| SBC004796_R | TGATTGCTGACAATATGCCTGAGCAAGTCTG | SBC004788 | | Backbone |
| SBC004727_F | TATCTGGCAGTCAGGGATTCCGCAA | SBC000126 | Plasmid part: PlacUV5_2 | Backbone |
| SBC004727_R | GTGAGTGCAGGTTATCTACGAGACGC | SBC000126 | | Backbone |
| SBC004728_F | CGTTCGATAGGATTGTGGATAGCAC | SBC000127 | Plasmid part: PlacUV5_3 | Backbone |
| SBC004728_R | TGCTGGATACGACGCTCTACTCACG | SBC000127 | | Backbone |
| SBC004729_F | TCCTGGGAAAGTCCGACGAGC | SBC000128 | Plasmid part: PlacUV5_4 | Backbone |
| SBC004729_R | GTGACCTGTGCAACGCTATCCA | SBC000128 | | Backbone |
| SBC004798_F | TGGTTCACGTTGGCAGATAGCGTGAAAAAAA | SBC004790 | Plasmid part: PlacUV5_5 | Backbone |
| SBC004798_R | CGATGGCTAGTAATGGGTCTGAGGATCTTG | SBC004790 | | Backbone |

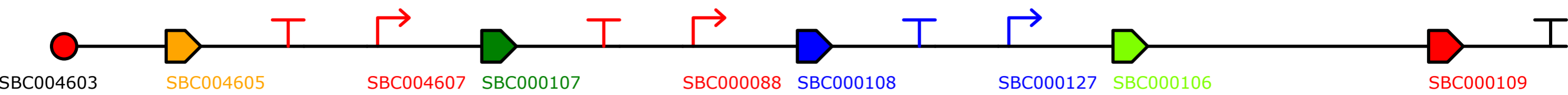
Table D2. Bridging oligonucleotides for LCR assembly of plasmids.

| Design | Primer name | Bridging oligo description: [Part1_ID - Part2_ID] | Part1_name - Part2_name | Sequence |
|--------|-------------|---|--------------------------------|--|
| DE13 | SB005609 | [SB004603 - SB004605] | SC101 - KanR | GGTCATTACTGGATCTATCAACGAGGTCCAAGCGAGCTCTCGAACCCACAGTCCC |
| DE13 | SB005610 | [SB004605 - SB004607] | KanR - lacI-Ptrc | CGCCCCAGCTGGCAATTCGACGCTCGACACCATCGAATGGTGA |
| DE13 | SB005611 | [SB004607 - SB000107] | lacI-Ptrc - Ec_DAHPS | GGAAATGTGAGCGGATAACAATTTAGAATTCAAAAGATCTTTTAAAGAACAGGAAACTCAGCTCGTCCACATTC |
| DE13 | SB005612 | [SB000107 - SB000088] | Ec_DAHPS - Ptrc | CGCGTTAAGGCCCCGCGAGGTTAAATAGTTCCTTCACGATAGCCGCTGA |
| DE13 | SB005613 | [SB000088 - SB000108] | Ptrc - Ec_PEPS | CCGCGGTAGGGAAGCGAAGACGTCATTTCACGAAGCCACGGACCCA |
| DE13 | SB005614 | [SB000108 - SB000127] | Ec_PEPS - PlacUV5 3 | GCTGAGCCTTCCGCAACTGAAGAACTAAGCTCGGTAGGATTGGATAGACCC |
| DE13 | SB005615 | [SB000127 - SB000106] | PlacUV5 3 - Ec_CMPDH | CCGTGATAGAGCTGTATCCAGCACAACCTACCTCCGCTGATCAGGAGG |
| DE13 | SB005616 | [SB000106 - SB000109] | Ec_CMPDH - Ec_TKT | GCCAAGCAAATGACAACCGTCAGTGATTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005617 | [SB000109 - SB0004603] | Ec_TKT - SC101 | GACAAGTGGTTGCCAAAGCAAAGAACTCTATAAAGATCAAACCTCGAGTAAGGATCTCCAGCG |
| DE13 | SB005620 | [SB004605 - SB004609] | KanR - lacI-PlacUV5 | GGCCCCAGCTGGCAATTCGACGCTGTGGTCAATAGTGAAGTAACCTA |
| DE13 | SB005621 | [SB004609 - SB000106] | lacI-PlacUV5 - Ec_CMPDH | GGAATTTGAGCGGATAACAATTTAGAATTCAAAAGATCTTTTAAAGAACAACTACTCCGCTCGTATCAGGAGG |
| DE13 | SB005622 | [SB000106 - SB000108] | Ec_CMPDH - Ec_PEPS | GCCAAGCAAATGACAACCGTCAGTGATGATTTCACGAAGCCACGGACCCA |
| DE13 | SB005623 | [SB000108 - SB000124] | Ec_PEPS - Ptrc2 | GCTGAGCCTTCCGCAACTGAAGAACTAAGCCAGGAGTTGGCTCAACTCT |
| DE13 | SB005624 | [SB000124 - SB000109] | Ptrc2 - Ec_TKT | GTTGCTCAGCTTAAACGAGGCTTTAGAACAAAGACAGTTCGGCGGAGCTC |
| DE13 | SB005625 | [SB000109 - SB000128] | Ec_TKT - PlacUV5 4 | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAATCTCGGGAAGTCCGACGAGCG |
| DE13 | SB005626 | [SB000128 - SB000106] | PlacUV5 4 - Ec_DAHPS | GCTTGATAGCGTTCCACAGGTCACACAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005627 | [SB000107 - SB0004603] | Ec_DAHPS - SC101 | CGCGTTAAGGCCCCGCGAGGTTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE13 | SB005630 | [SB000106 - SB000107] | Ec_CMPDH - Ec_DAHPS | GCCAAGCAAATGACAACCGTCAGTGAAACAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005631 | [SB000107 - SB000127] | Ec_DAHPS - PlacUV5 3 | CGCGTTAAGGCCCCGCGAGGTTAAGCTCGGTAGGATTTGGATAGACCC |
| DE13 | SB005632 | [SB000127 - SB000108] | PlacUV5 3 - Ec_PEPS | CCGTGATAGAGCTGTATCCAGCATGATTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005633 | [SB000108 - SB000125] | Ec_PEPS - Ptrc3 | GCTGAGCCTTCCGCAACTGAAGAACTAAGCCGGCTCCTACTTGTGAC |
| DE13 | SB005634 | [SB000125 - SB000109] | Ptrc3 - Ec_TKT | CCTACTGTCTGGCTGCTGAGTTTAAAGAACAGACAGTTCGGCGGAGCTTC |
| DE13 | SB005637 | [SB000088 - SB000109] | Ptrc - Ec_TKT | CCGCGTAGGGAAGCGAAGACTTTAGAACAAAGACAGTTCGGCGGAGCTTC |
| DE13 | SB005638 | [SB000109 - SB000127] | Ec_TKT - PlacUV5 3 | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAAGCTCGGTAGGATTTGGATAGACCC |
| DE13 | SB005639 | [SB000108 - SB000128] | Ec_PEPS - PlacUV5 4 | GCTGAGCCTTCCGCAACTGAAGAACTAAGCTCGGGAAGTCCGACGAGCG |
| DE13 | SB005640 | [SB000128 - SB000106] | PlacUV5 4 - Ec_CMPDH | GCTTGATAGCGTTCCACAGGTCACACAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005641 | [SB000106 - SB0004603] | Ec_CMPDH - SC101 | CGCGTTAAGGCCCCGCGAGGTTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE13 | SB005644 | [SB004609 - SB000108] | lacI-PlacUV5 - Ec_PEPS | GGAATTTGAGCGGATAACAATTTAGAATTCAAAAGATCTTTTAAAGAACCACTTTTAAAGAACCAAGCCAGACCCA |
| DE13 | SB005645 | [SB000108 - SB000107] | Ec_PEPS - Ec_DAHPS | GCTGAGCTTCCGCAACTGAAGAACTAAGCAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005646 | [SB000107 - SB000109] | Ec_DAHPS - Ec_TKT | CGCGTTAAGGCCCCGCGAGGTTAATTAAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005647 | [SB000109 - SB000106] | Ec_TKT - Ec_CMPDH | GACAAGTGGTTGCCAAAGCAAAGAACTCTATAAAGAACTCCGCTCGTATCAGGAGG |
| DE13 | SB005650 | [SB000108 - SB000088] | Ec_PEPS - Ptrc | GCTGAGCCTTCCGCAACTGAAGAACTAAGTTCCTTCACGATAGCCGCTGA |
| DE13 | SB005651 | [SB000088 - SB000106] | Ptrc - Ec_CMPDH | CCGCGTAGGGAAGCGAAGCAAACTACTCCGCTCGTATCAGGAGG |
| DE13 | SB005652 | [SB000106 - SB000124] | Ec_CMPDH - Ptrc2 | GCCAAGCAAATGACAACCGTCAGTGAGCCGAGGATTGGCTCAACTCT |
| DE13 | SB005653 | [SB000124 - SB000107] | Ptrc2 - Ec_DAHPS | GTTGCTCAGCTTAAACGAGGCTTTAGAACAAAGACAGTTCGGCGGAGCTC |
| DE13 | SB005656 | [SB004607 - SB000107] | lacI-Ptrc - Ec_TKT | GCTGAGCCTTCCGCAACTGAAGAACTAAGCTCGGGAAGTCCGACGAGCTC |
| DE13 | SB005657 | [SB000109 - SB000108] | Ec_TKT - Ec_PEPS | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAATCTCGGAGTCCGACGAGCCA |
| DE13 | SB005658 | [SB000127 - SB000107] | PlacUV5 3 - Ec_DAHPS | CCGTGATAGAGCTGTATCCAGCACAAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005659 | [SB000107 - SB000106] | Ec_DAHPS - Ec_CMPDH | CGCGTTAAGGCCCCGCGAGGTTAAGCAAACTCCTCCGCTGATCAGGAGG |
| DE13 | SB005662 | [SB000106 - SB000126] | Ec_CMPDH - PlacUV5 2 | GCCAAGCAAATGACAACCGTCAGTGATTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005663 | [SB000126 - SB000107] | PlacUV5 2 - Ec_DAHPS | GGCGTCTCGATAGATAAAGCTCAGTCCAGCAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005664 | [SB000107 - SB000108] | Ec_DAHPS - Ec_PEPS | CCGCTTAAAGCCCGTGGAGTTAATGCAATTTAGAACAAAGCAGGACCCA |
| DE13 | SB005665 | [SB000108 - SB000109] | Ec_PEPS - Ec_TKT | GCTGAGCCTTCCGCAACTGAAGAACTAAGTTCCTTCACGATAGCCGCTGA |
| DE13 | SB005668 | [SB000108 - SB000126] | Ec_PEPS - SC101 | GCTGAGCCTTCCGCAACTGAAGAACTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE13 | SB005671 | [SB000126 - SB000109] | PlacUV5 2 - Ec_TKT | GGGCTCTGATAGATAAAGCTCAGTCACTACTTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005674 | [SB000109 - SB000126] | Ec_TKT - PlacUV5 2 | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAATCTCGGAGTCCGACGAGCCA |
| DE13 | SB005675 | [SB000126 - SB000106] | PlacUV5 2 - Ec_CMPDH | GGGCTCTGATAGATAAAGCTCAGTCACTCAAACTACTCCGCTCGTATCAGGAGG |
| DE13 | SB005676 | [SB000124 - SB000108] | Ptrc2 - Ec_PEPS | GTTGCTCAGCTTAAACGAGGCTGATTTAGAACAAAGCAGGACCCA |
| DE13 | SB005677 | [SB000125 - SB000107] | Ptrc3 - Ec_DAHPS | CCTACTGTCTGGCTGCTGAGCAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005680 | [SB000108 - SB000126] | Ec_PEPS - PlacUV5 2 | GCTGAGCCTTCCGCAACTGAAGAACTAATTAAGCAGTCCGAGGATTCGCAAC |
| DE13 | SB005681 | [SB000127 - SB000109] | PlacUV5 3 - Ec_TKT | CCGTGATAGAGCTGTATCCAGCATTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005684 | [SB000109 - SB000124] | Ec_TKT - Ptrc2 | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAAGCAGGATTTGGCTCAACTCT |
| DE13 | SB005685 | [SB000124 - SB000106] | Ptrc2 - Ec_CMPDH | GCTGCTCAGCTTAAACGAGGCAAACCTACTCCGCTCGTATCAGGAGG |
| DE13 | SB005688 | [SB000107 - SB000126] | Ec_DAHPS - PlacUV5 2 | GGGCTTAAAGCCCGTGGAGTTAATCTGGCAGTCCAGGATTCGCAAC |
| DE13 | SB005689 | [SB000109 - SB000125] | Ec_TKT - Ptrc3 | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAAGCCGGGCTCCTACTTTGTGAC |
| DE13 | SB005690 | [SB000125 - SB000108] | Ptrc3 - Ec_PEPS | CCTACTGTCTGGCGTGGAGTTCATTTAGAACAAAGCAGGACCCA |
| DE13 | SB005693 | [SB000106 - SB000088] | Ec_CMPDH - Ptrc | GCCAAGCAAATGACAACCGTCAGTGAATAGTTCCTTCACGATAGCCGCTGA |
| DE13 | SB005694 | [SB000107 - SB000125] | Ec_DAHPS - Ptrc3 | CGCGTTAAGGCCCCGCGAGGTTAAGCAGGCTCCTACCTATTGTGAC |
| DE13 | SB005697 | [SB000125 - SB000106] | Ptrc3 - Ec_CMPDH | CCTACTGTCTGGCGTGGAGCAAACTCCTCCGCTCGTATCAGGAGG |
| DE13 | SB005700 | [SB000109 - SB000107] | Ec_TKT - Ec_DAHPS | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAAGCAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005703 | [SB000108 - SB000106] | Ec_PEPS - Ec_CMPDH | GCTGAGCCTTCCGCAACTGAAGAACTAAGCAAACTACTCCGCTCGTATCAGGAGG |
| DE13 | SB005706 | [SB000126 - SB000108] | PlacUV5 2 - Ec_PEPS | GGCGTCTCGATAGATAAAGCTCAGTCACTTTAGAACAAAGCAGGACCCA |
| DE13 | SB005711 | [SB000107 - SB000124] | Ec_DAHPS - Ptrc2 | CGCGTTAAGGCCCCGCGAGGTTAAGCCAGGATTTGGCTCAACTCT |
| DE13 | SB005716 | [SB000109 - SB000088] | Ec_TKT - Ptrc | GACAAGCTGGTTGCCAAAGCAAAGAACTCTATAAATAGTTCCTTCACGATAGCCGCTGA |
| DE13 | SB005717 | [SB000088 - SB000107] | Ptrc - Ec_DAHPS | CCGCGTAGGGAAGCGAAGCAGCAGGAACTCAGCTCGCTCACATTC |
| DE13 | SB005720 | [SB000128 - SB000109] | PlacUV5 4 - Ec_TKT | CGTTGATAGCGTTCCACAGGTCACCTTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE13 | SB005723 | [SB000106 - SB000127] | Ec_CMPDH - PlacUV5 3 | GCTGAGCCTTCCGCAACTGAAGAACTAAGCTCGGGAAGTTCGATAGACCC |
| DE13 | SB005732 | [SB000106 - SB000125] | Ec_CMPDH - Ptrc3 | GCCAAGCAAATGACAACCGTCAGTGACAAGGCTCCTACCTATTGTGAC |
| DE13 | SB005737 | [SB000107 - SB000128] | Ec_DAHPS - PlacUV5 4 | CGCGTTAAGGCCCCGCGAGGTTAAGCTCGGGAAGTCCGACGAGCG |
| DE13 | SB005740 | [SB000106 - SB000128] | Ec_CMPDH - PlacUV5 4 | GCCAAGCAAATGACAACCGTCAGTGATTCGGGAAGTCCGACGAGCG |
| DE13 | SB005743 | [SB000128 - SB000107] | PlacUV5 4 - Ec_PEPS | GCTTGATAGAGCTGTATCCAGCATTTAGAACAAAGCAGTTCGGCGGAGCTTC |
| DE22 | SB007594 | [SB004604 - SB0004607] | AmpR - lacI-Ptrc | CACATTTCCCGAAAAGTCCCACTGAGCTGCAACCATCGAATGGTGA |
| DE22 | SB007609 | [SB0004604 - SB0004609] | AmpR - lacI-PlacUV5 | CACATTTCCCGAAAAGTCCCACTGAGCTGCTGCTAATGAGTGAAGTCAACTTA |
| DE22 | SB009490 | [SB004602 - SB0004604] | pBBR1 - AmpR | GGCTACTACTGATATCAACAGAGTCCAGGAGCTCGAGGATTTGGCTGACAGTACCAATG |
| DE22 | SB009654 | [SB004607 - SB0004560] | lacI-Ptrc - MIMAO_082865 | GGAAATGTGAGCGGATAACAATTTAGAATTCAAAAGATCTTTTAAAGAACAGGAACTCAGCTCGGATTCATTGTGATATGATCTACTTCACT |
| DE22 | SB009655 | [SB0004560 - SB000126] | MIMAO_082865 - PlacUV5 2 | GCTTGTAGCTGGGATATTCCAGCTAATAAATCTCGGACGTCAGGATTCGCAAC |
| DE22 | SB009656 | [SB000126 - SB0007303] | PlacUV5 2 - PcPAAS_Q06086 | GGCGTCTGATAGATAAAGCTCAGTCACTGAGCTGCTTTCTTGAGCCCTTGA |
| DE22 | SB009657 | [SB0007303 - SB0007335] | PcPAAS_Q06086 - PsTYDC2_P54769 | CTGTAGATGATACCTTCACTCAATAAAGCTGGTAGAAGTGTGGAGTTCGAAAGGATATATAAGTATGACCCCAAGGACCTTTGATGC |
| DE22 | SB009658 | [SB0007335 - SB000128] | PsTYDC2_P54769 - PlacUV5 4 | AGGCAAAATCAGTAGGCTGACTTCTCATCTAATCTCGGGAAGTCCGACGAGCG |
| DE22 | SB009659 | [SB000128 - SB0007183] | PlacUV5 4 - ScADH1_P00330 | CGTTGGATAGCTGTCCACAGGTCAGTGTCTAGCAGGTCGATAGTACCGCT |
| DE22 | SB009660 | [SB0007183 - SB0004600] | ScADH1_P00330 - ColE1 | TGTAGGTCGTTAGCTGGTGAATCTCAAGTAAAGATCAAACCTCGATAGGATCTCCAGGC |
| DE22 | SB009662 | [SB0004560 - SB000088] | MIMAO_082865 - Ptrc | GCTGTCTGGCGGATATTCCAGCTAATAAAGTCCCTTCACGATAGCCGCTGA |
| DE22 | SB009663 | [SB000088 - SB0007183] | Ptrc - ScADH1_P00330 | CCGCGTAGGGAAGCGAAGCAGTGTCTAGCAGGTCGATAGTACCGT |
| DE22 | SB009664 | [SB0007183 - SB000127] | ScADH1_P00330 - PlacUV5 3 | TGTAGGTCGTTAGCTGGTGTGATACCTCGAAGTAAAGCTCGCTAGGATTTGGATAGACCC |
| DE22 | SB009665 | [SB000127 - SB0007303] | PlacUV5 3 - PcPAAS_Q06086 | CCGTGATAGAGCTGTATCCAGCAGTTCGAGCTTCTTTCTGAGCCCTTGA |
| DE22 | SB009666 | [SB0007335 - SB0004600] | PsTYDC2_P54769 - ColE1 | AGGCAAAATCAGTAGGCTGACTTCTCATCTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE22 | SB009668 | [SB0004560 - SB0007183] | MIMAO_082865 - ScADH1_P00330 | GCTGTCTGGCGGATATTCCAGCTAATAAATGCTGACGAGGTCGATAGTACCGCT |
| DE22 | SB009669 | [SB0007183 - SB0007303] | ScADH1_P00330 - PcPAAS_Q06086 | TGTAGGTCGTTAGCTGGTGAATCTCGAAGTAAAGTTCGAGCTTCTTTCTGAGCCCTTGA |
| DE22 | SB009671 | [SB0004560 - SB0007335] | MIMAO_082865 - PsTYDC2_P54769 | GATGTCTGGCGGATATTCCAGCTAATAAAGGATATATAAGTATGACCCCAAGGACCTTTGATGG |
| DE22 | SB009672 | [SB0007335 - SB000127] | PsTYDC2_P54769 - PlacUV5 3 | AGGCAAAATCAGTAGGCTGACTTCTCATCTAAGCTCGCTAGGATTTGGATAGACCC |
| DE22 | SB009673 | [SB000127 - SB0007183] | PlacUV5 3 - ScADH1_P00330 | CCGTGATAGAGCTGTATCCAGCATTTAGAACAAAGCAGTTCGATAGTACCGCT |
| DE22 | SB009674 | [SB0007303 - SB0004600] | PcPAAS_Q06086 - ColE1 | CTGTAGATGATACCTTCACTCAATAAAGCTGGTAGAAGTGTAGTAAATCTGACCCAACTCGATAGGATCTCCAGGC |
| DE22 | SB009676 | [SB0004560 - SB0007303] | MIMAO_082865 - PcPAAS_Q06086 | GATGTCTGGCGGATATTCCAGCTAATAAAGTCCGACTTCTTTCTGAGCCCTTGA |
| DE22 | SB009677 | [SB0007335 - SB0007183] | PsTYDC2_P54769 - ScADH1_P00330 | AGGCAAAATCAGTAGGCTGACTTCTCATCTAATGCTGACGAGTTCGATAGTACCGT |
| DE22 | SB009679 | [SB000088 - SB0007335] | Ptrc - PsTYDC2_P54769 | CCGCGTAGGGAAGCGAAGCAGGAAAGGATATAAAGTATGACCCCAAGGACCTTTGATGG |
| DE22 | SB009680 | [SB0007183 - SB000128] | ScADH1_P00330 - PlacUV5 4 | TGTAGGTCGTTAGCTGGTGTGATACCTCGAAGTAACTCCGAGGAACTCCGAGGAGCG |
| DE22 | SB009681 | [SB000128 - SB0007303] | PlacUV5 4 - PcPAAS_Q06086 | CGTTGATAGCGTTCCACAGGTCAGTTCGAGCTTCTTTCTGAGCCCTTGA |
| DE22 | SB009683 | [SB0004609 - SB0007183] | lacI-PlacUV5 - ScADH1_P00330 | GGAATTTGAGCGGATAACAATTTAGAATTCAAAAGATCTTTTAAAGAACAGGATTCGACTCGGATTCATTGTGATATGATCTACTTCACT |
| DE22 | SB009684 | [SB0007183 - SB0004560] | ScADH1_P00330 - MIMAO_082865 | TGTAGGTCGTTAGCTGGTGAATCTCAAGTAAAGTTCGCTGAGGATTCATTGTGATATGATCTACTTCACT |
| DE22 | SB009685 | [SB0004560 - SB000127] | MIMAO_082865 - PlacUV5 3 | GCTGTCTGGCGGATATTCCAGCTAATAAAGTCCGAGTTCGATAGGATTCGATAGACCC |
| DE22 | SB009686 | [SB000127 - SB0007335] | PlacUV5 3 - PsTYDC2_P54769 | CCGTGATAGAGCTGTATCCAGCAGGATATAAAGTATGACCCCAAGGACCTTTGATGG |
| DE22 | SB009688 | [SB0004607 - SB0007303] | lacI-Ptrc - PcPAAS_Q06086 | GGAATTTGAGCGGATAACAATTTAGAATTCAAAAGATCTTTTAAAGAACAGGATTCGACTCGGATTCATTGTGATATGATCTACTTCACT |
| DE22 | SB009689 | [SB0007303 - SB000126] | PcPAAS_Q06086 - PlacUV5 2 | CTGTAGATGATACCTTCACTCAATAAAGCTGGTAGAAGTGTAGTAAATCTGCGAGTCCGAC |
| DE22 | SB009690 | [SB000126 - SB0007183] | PlacUV5 2 - ScADH1_P00330 | GGCGTCTCGATAGATAAAGCTCAGTCTGCTGAGCAGGTCGATAGTACCGT |
| DE22 | SB009691 | [SB0007335 - SB000125] | PsTYDC2_P54769 - Ptrc3 | AGGCAAAATCAGTAGGCTGACTTCTCATCTAAGCAGGCGGCTCCTCACTTATTTGAC |
| DE22 | SB009692 | [SB000125 - SB0004560] | Ptrc3 - MIMAO_082865 | CCTACTGTCTGGCGTGGAGTTCAGCTGCTGCGGATTCATTGTGATATGATCTACTTCACT |

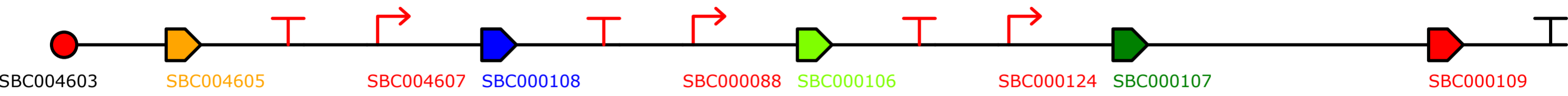
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| DE40 | SB0009992 | [SB0007281 - SB0000100] | AtCCR1_Q959N9 - Gm4CL3_P31687 | GGAAAGCGTAGAAAATGGTATCAAATCGGCTGTAACAGAGCTAAAAACAAACACGTAATACCAGGAATACTTATATAAGGAGG |
| DE40 | SB0009994 | [SB0007275 - SB0007239] | PHCCR1_A0A059TC02 - PsCAD_P0DMP5 | GAACCGATCATTGGATCCAAACCTGAGAGTAAGGTAATGCTAGTATCGCAGTGCAGTTCCTC |
| DE42 | SB0006249 | [SB0004605 - SB0004607] | KanR - lacl-Ptrc | GGCCCCAGCTGGCAATCCGACGTGACACCATCGAATGGTGA |
| DE42 | SB0006256 | [SB0004605 - SB0004609] | KanR - lacl-PlacUV5 | GGCCCCAGCTGGCAATCCGACGTGCGTGGCTAATGAGTGAGCTAACTTA |
| DE42 | SB0008291 | [SB0004603 - SB0004605] | SC101 - KanR | GGTCACTAGTATCTATCAACAGGAGTCCAAGGAGCTCTCGAACCCACGATCC |
| DE42 | SB0009866 | [SB0004607 - SB0007269] | lacl-Ptrc - ObEGS1_Q15G14 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGTGTCTAGTATCGCGATCATATTATCAATGCTAATTAGG |
| DE42 | SB0009867 | [SB0007269 - SB0000126] | ObEGS1_Q15G14 - PlacUV5 2 | CCGGCTTCGGCTGGTTTTGATATCTGGCAGTCAGGATTCCGCAAC |
| DE42 | SB0009868 | [SB0000126 - SB0007247] | PlacUV5 2 - PhCFAT_A1XWY7 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGGCTGGCTTGTATCGTGGCACCC |
| DE42 | SB0009869 | [SB0007247 - SB0004602] | PhCFAT_A1XWY7 - pBBR1 | CGTGCTACCTAGATTTGACCGCAACGCTACTAAGGATCAAACCTCGAGTAAGGATCTCCAGGC |
| DE42 | SB0009871 | [SB0004607 - SB0007247] | lacl-Ptrc - PhCFAT_A1XWY7 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGGCTGGCTTGTATCGTGGCACCC |
| DE42 | SB0009872 | [SB0007247 - SB0000126] | PhCFAT_A1XWY7 - PlacUV5 2 | CGTGCTACCTAGATTTGACCGCAACGCTACTAATATCTGGCAGTCAGGGAATCCGCAAC |
| DE42 | SB0009873 | [SB0000126 - SB0007269] | PlacUV5 2 - ObEGS1_Q15G14 | GGCGTCTGAGATAAAGCTGCACTCACTGCTAGTATCGCGATCATATTATCAATGCTAATTAGGACC |
| DE42 | SB0009874 | [SB0007269 - SB0004602] | ObEGS1_Q15G14 - pBBR1 | CCGGCTTCGGCTGGTTTTGAGGATCCAACTCGATAGGATCTCCAGGC |
| DE42 | SB0009877 | [SB0007247 - SB0007269] | PhCFAT_A1XWY7 - ObEGS1_Q15G14 | CGTGCTACCTAGATTTGACCGCAACGCTACTAATGCTAGTATCGCGATCATATTATCAATGCTAATTAGGACC |
| DE42 | SB0009879 | [SB0007269 - SB0007247] | ObEGS1_Q15G14 - PhCFAT_A1XWY7 | CCGGCTTCGGCTGGTTTTGAGCTGGCTGTATCGTGGCACCC |
| DE42 | SB0009883 | [SB0007247 - SB0000088] | PhCFAT_A1XWY7 - Ptrc | CGTGCTACCTAGATTTGACCGCAACGCTACTAATAGTTCCTCTCAGATAGCCGCTGA |
| DE42 | SB0009884 | [SB0000088 - SB0007269] | Ptrc - ObEGS1_Q15G14 | CCGCGTAGGGGAAGCGAAGAGCTGTCTAGTATCGCGATCATATTATCAATGCTAATTAGGACC |
| DE42 | SB0009886 | [SB0007269 - SB0000088] | ObEGS1_Q15G14 - Ptrc | CCGGCTTCGGCTGGTTTTGAGATAGTTCCTCTCAGATAGCCGCTGA |
| DE42 | SB0009887 | [SB0000088 - SB0007247] | Ptrc - PhCFAT_A1XWY7 | CCGCGTAGGGGAAGCGAAGAGCTGTCTAGTATCGCGATCATATTATCAATGCTAATTAGGACC |
| DE46 | SB0007594 | [SB0004604 - SB0004607] | AmpR - lacl-Ptrc | CACATTTCCCGAAAAGTGCACCTGACGTCGACACCATCGAATGGTGCA |
| DE46 | SB0007609 | [SB0004604 - SB0004609] | AmpR - lacl-PlacUV5 | CACATTTCCCGAAAAGTGCACCTGACGTCGCTGCTAATGAGTGAGCTAACTTA |
| DE46 | SB0009490 | [SB0004602 - SB0004604] | pBBR1 - AmpR | GGTCACTAGTATCTATCAACAGGAGTCCAAGGAGCTCGTAAACTGGTCTGACAGTACCAATG |
| DE46 | SB0009491 | [SB0004609 - SB0007419] | lacl-PlacUV5 - PpMR_P11444 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGGAAACAATAAGGCTTGTCTGATTTGGTTAATGC |
| DE46 | SB0009492 | [SB0007419 - SB0000126] | PpMR_P11444 - PlacUV5 2 | ATAATCTGGCGTGAAGGAGATTTGGCAAATATCTTGTAAATATCTGGCAGTCAGGATTCCGCAAC |
| DE46 | SB0009493 | [SB0000126 - SB0007269] | PlacUV5 2 - SyHMAS_A0A101NRJ5 | GGCGTCTGAGATAAAGCTGCACTCACTAATAGTAAAGGATATAAGCTCCTTATCGTATTGCTTCCA |
| DE46 | SB0009494 | [SB0007171 - SB0004602] | SyHMAS_A0A101NRJ5 - pBBR1 | GGCGCACCGGAAGGAACTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE46 | SB0009496 | [SB0004609 - SB0007171] | lacl-PlacUV5 - SyHMAS_A0A101NRJ5 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGTAAATAGGGATATAAGCTCCTTATCGTATTGCTTCT |
| DE46 | SB0009497 | [SB0007171 - SB0007419] | SyHMAS_A0A101NRJ5 - PpMR_P11444 | GGCGCACCGGAAGGAACTAAGAAACAATAAGGCTTGTCTGATTTGGTTAATGC |
| DE46 | SB0009498 | [SB0007419 - SB0004602] | PpMR_P11444 - pBBR1 | ATAATCTGGCGTGAAGGAGATTTGGCAAATATCTTGTAAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE46 | SB0009500 | [SB0007171 - SB0000088] | SyHMAS_A0A101NRJ5 - Ptrc | CCGCGTACCGGAAGGAACTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE46 | SB0009501 | [SB0000088 - SB0007419] | Ptrc - PpMR_P11444 | CCGCGTAGGGGAAGCGAAGAGCTGCTAATGAGGCTGCTGATTTGGTTAATGC |
| DE46 | SB0009504 | [SB0007419 - SB0007171] | PpMR_P11444 - SyHMAS_A0A101NRJ5 | ATAATCTGGCGTGAAGGAGATTTGGCAAATATCTTGTAAATAGGATATAAGCTCCTTATCGTATTGCTTCCA |
| DE46 | SB0009508 | [SB0007171 - SB0000126] | SyHMAS_A0A101NRJ5 - PlacUV5 2 | GGCGCACCGGAAGGAACTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE46 | SB0009509 | [SB0000126 - SB0007419] | PlacUV5 2 - PpMR_P11444 | GGCGTCTGAGATAAAGCTGCACTCACTAATAGTAAAGGATATAAGCTCCTTATCGTATTGCTTCCA |
| DE46 | SB0009512 | [SB0007419 - SB0000088] | PpMR_P11444 - Ptrc | GGCGCACCGGAAGGAACTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE46 | SB0009513 | [SB0000088 - SB0007171] | Ptrc - SyHMAS_A0A101NRJ5 | GGCGTCTGAGATAAAGCTGCACTCACTAATAGTAAAGGATATAAGCTCCTTATCGTATTGCTTCCA |
| DE47 | SB0007594 | [SB0004604 - SB0004607] | AmpR - lacl-Ptrc | CACATTTCCCGAAAAGTGCACCTGACGTCGACACCATCGAATGGTGCA |
| DE47 | SB0007597 | [SB0004554 - SB0000091] | RsTYR2_Q8Y2J8 - HaTAL_A9AUJ9 | GTGACCCAGAAATCGATCGAAGTTCGAGTATTTAATAAGGAGCCGCTAAACTACCGCA |
| DE47 | SB0007602 | [SB0000126 - SB0004554] | PlacUV5 2 - RsTYR2_Q8Y2J8 | GCTGCTCATGATAACTGCACTCAAGGCTCTCACTGAAGGATGAGGAAAAACG |
| DE47 | SB0007606 | [SB0000088 - SB0004554] | Ptrc - RsTYR2_Q8Y2J8 | CCGCGTAGGGGAAGCGAAGAGCTGTCTCACTGAAGGATGAGGAAAAACG |
| DE47 | SB0007609 | [SB0004604 - SB0004609] | AmpR - lacl-PlacUV5 | CACATTTCCCGAAAAGTGCACCTGACGTCGCTGCTAATGAGTGAGCTAACTTA |
| DE47 | SB0007612 | [SB0004607 - SB0004554] | lacl-Ptrc - RsTYR2_Q8Y2J8 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGGCTCTCACTGAAGGATGAGGAAAAACG |
| DE47 | SB0007613 | [SB0004554 - SB0000088] | RsTYR2_Q8Y2J8 - Ptrc | GTGACCCAGAAATCGATCGAAGTTCGAGTATTTAATAAGGATTTCCCTCAGGATAGCCGCTGA |
| DE47 | SB0007623 | [SB0004554 - SB0000126] | RsTYR2_Q8Y2J8 - PlacUV5 2 | GTGACCCAGAAATCGATCGAAGTTCGAGTATTTAATAAGGATTTCCCTCAGGATGAGGAAAAACG |
| DE47 | SB0009490 | [SB0004602 - SB0004604] | pBBR1 - AmpR | GGTCACTAGTATCTATCAACAGGAGTCCAAGGAGCTCGTAAACTGGTCTGACAGTACCAATG |
| DE47 | SB0009996 | [SB0004609 - SB0004561] | lacl-PlacUV5 - BmTYR(V218F)_B2ZB02 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGGAGCCACTCAATCAAGGATAATTAGTAAAGTTCAGT |
| DE47 | SB0009997 | [SB0004561 - SB0007155] | BmTYR(V218F)_B2ZB02 - PkCOMT1_Q43046 | TGCGGAAAAAGCAAACGCTGCTGCTAATAAAGAGCCGAAAGCAAAGTTGTCTCAACC |
| DE47 | SB0009998 | [SB0007155 - SB0000091] | PkCOMT1_Q43046 - HaTAL_A9AUJ9 | CATGTCATCGAGTTTCGCAAGAGGCTCAACGAGCCGCTAAACTACCGCA |
| DE47 | SB0009999 | [SB0000091 - SB0004601] | HaTAL_A9AUJ9 - p15a | GCTGATCAAATCTACTTACCAAAGGCGCGACGGATCAAACCTCGATAGGATCTCCAGGC |
| DE47 | SB0100001 | [SB0004561 - SB0000126] | BmTYR(V218F)_B2ZB02 - PlacUV5 2 | TGCGGAAAAAGCAAACGCTGCTGCTAATAAATAGTTCCTCTCAGGATGAGGAAAAACG |
| DE47 | SB0100002 | [SB0000126 - SB0007155] | PlacUV5 2 - PkCOMT1_Q43046 | GGCGTCTCGTAGATAAAGCTGCACTCAAGAGCCGAAAGCAAAGTTGTCTCAACC |
| DE47 | SB0100004 | [SB0000088 - SB0007155] | Ptrc - PkCOMT1_Q43046 | CCGCGTAGGGGAAGCGAAGAGGAGGCGGAAAGCAAAGTTGTCTCAACC |
| DE47 | SB0100006 | [SB0004607 - SB0007155] | lacl-Ptrc - PkCOMT1_Q43046 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGGAGCCGAAAGCAAAGTTGTCTCAACC |
| DE47 | SB0100007 | [SB0007155 - SB0004554] | PkCOMT1_Q43046 - RsTYR2_Q8Y2J8 | CATGTCATCGAGTTTCGCAAGAGGCTAAGGCTCTCACTGAAGGATGAGGAAAAACG |
| DE47 | SB0100110 | [SB0007155 - SB0000126] | PkCOMT1_Q43046 - PlacUV5 2 | CATGTCATCGAGTTTCGCAAGAGGCTAATATCTGCGAGTCAGGATCCGCAAC |
| DE47 | SB0100114 | [SB0007155 - SB0004561] | PkCOMT1_Q43046 - BmTYR(V218F)_B2ZB02 | CATGTCATCGAGTTTCGCAAGAGGCTAAGGCTCAATCAAGGATAAATAGTAAAGTTCAGT |
| DE47 | SB0100115 | [SB0004561 - SB0000091] | BmTYR(V218F)_B2ZB02 - HaTAL_A9AUJ9 | TGCGGAAAAAGCAAACGCTGCTGCTAATAAAGGAGCCGCTAAACTACCGCA |
| DE47 | SB0100117 | [SB0007155 - SB0000088] | PkCOMT1_Q43046 - Ptrc | CATGTCATCGAGTTTCGCAAGAGGCTAATAGTTCCTCTCAGGATAGCCGCTGA |
| DE47 | SB0100118 | [SB0000088 - SB0004561] | Ptrc - BmTYR(V218F)_B2ZB02 | CCGCGTAGGGGAAGCGAAGAGGAGGCTCAATCAAGGATAAATAGTAAAGTTCAGT |
| DE47 | SB0100121 | [SB0004554 - SB0007155] | RsTYR2_Q8Y2J8 - PkCOMT1_Q43046 | GTGACCCAGAAATCGATCGAAGTTCGAGTATTTAATAAGGAGCCGAAAGCAAAGTTGTCTCAACC |
| DE47 | SB0100124 | [SB0004561 - SB0000088] | BmTYR(V218F)_B2ZB02 - Ptrc | TGCGGAAAAAGCAAACGCTGCTGCTAATAAATAGTTCCTCTCAGGATGAGGAAAAACG |
| DE47 | SB0100127 | [SB0000126 - SB0004561] | PlacUV5 2 - BmTYR(V218F)_B2ZB02 | GGCGTCTCGTAGATAAAGCTGCACTCAAGAGCCACTCAATCAAGGATAAATAGTAAAGTTCAGT |
| DE49 | SB0007609 | [SB0004604 - SB0004609] | AmpR - lacl-PlacUV5 | CACATTTCCCGAAAAGTGCACCTGACGTCGCTGCTAATGAGTGAGCTAACTTA |
| DE49 | SB0009490 | [SB0004602 - SB0004604] | pBBR1 - AmpR | GGTCACTAGTATCTATCAACAGGAGTCCAAGGAGCTCGTAAACTGGTCTGACAGTACCAATG |
| DE49 | SB0009494 | [SB0007171 - SB0004602] | SyHMAS_A0A101NRJ5 - pBBR1 | GGCGCACCGGAAGGAACTAAGGATCAAACCTCGATAGGATCTCCAGGC |
| DE49 | SB0009496 | [SB0004609 - SB0007171] | lacl-PlacUV5 - SyHMAS_A0A101NRJ5 | GGAAATGTGAGCGGATAACAATTTAGAATCAAAGATCTTTAAGAAGTAAATAGGGATATAAGCTCCTTATCGTATTGCTTCT |

Design DE13

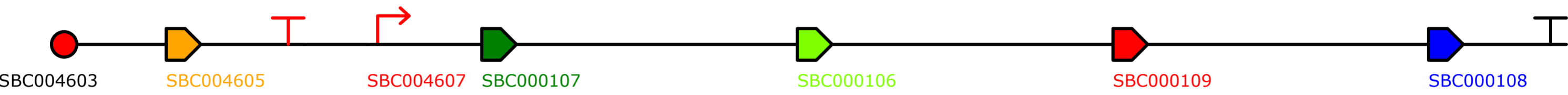
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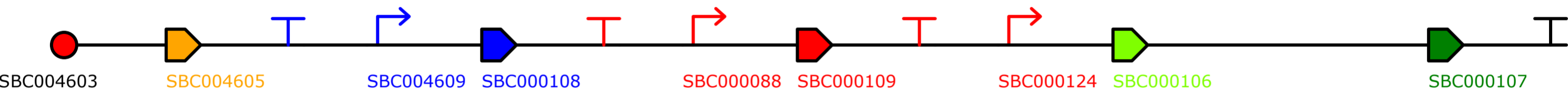
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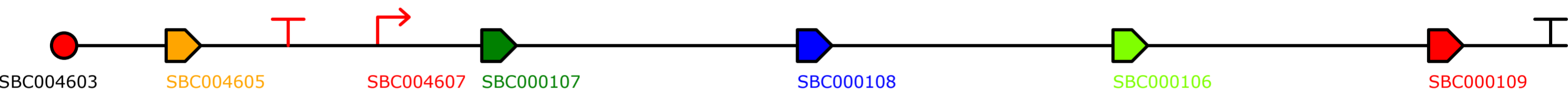
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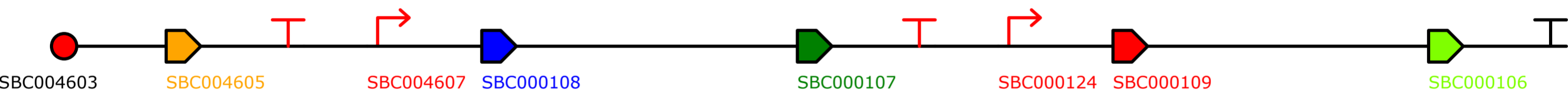
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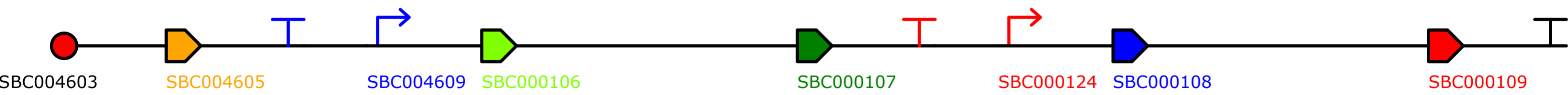
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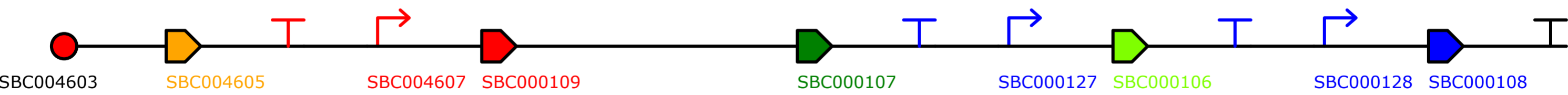
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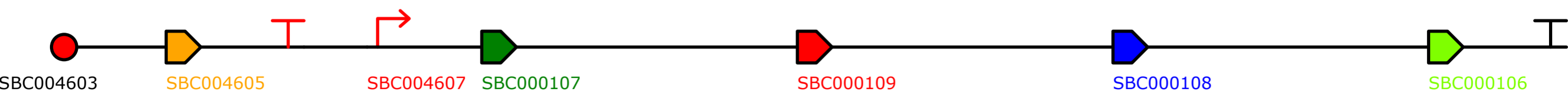
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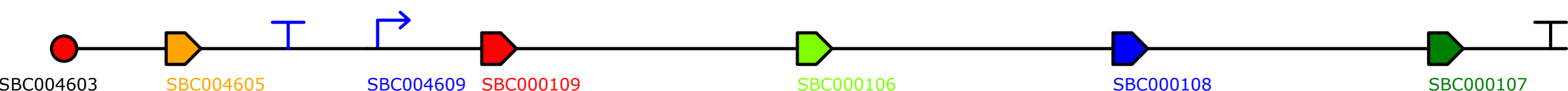
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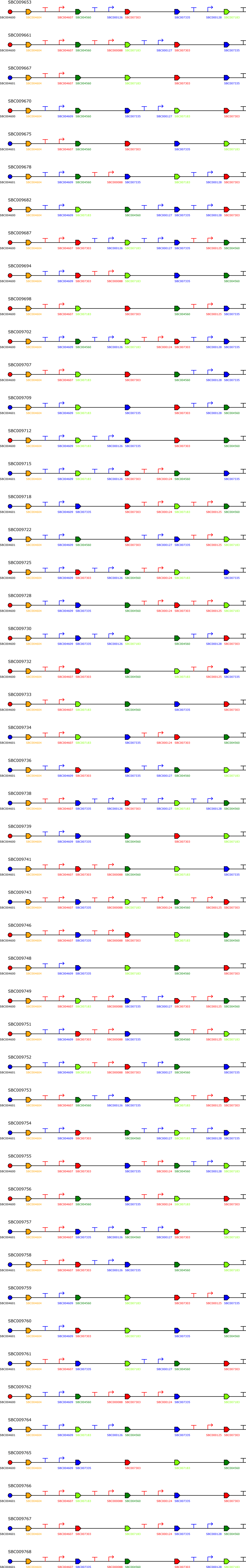
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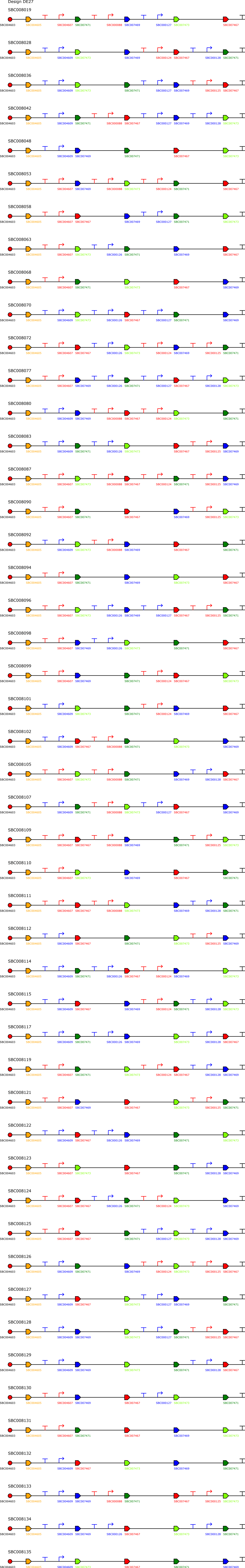


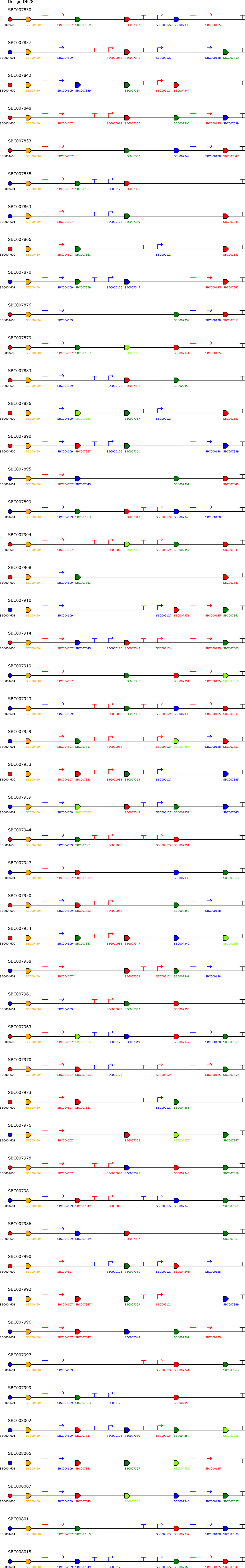
SBC005767



Design DE22





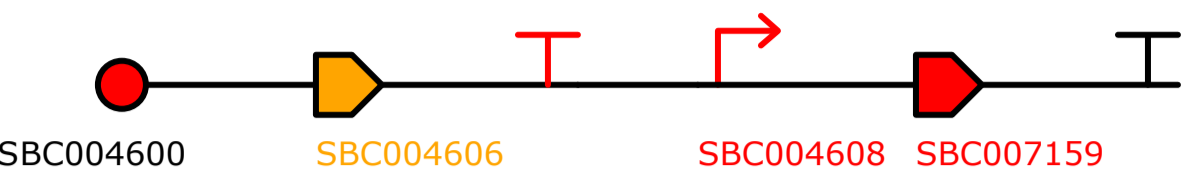


Design DE31

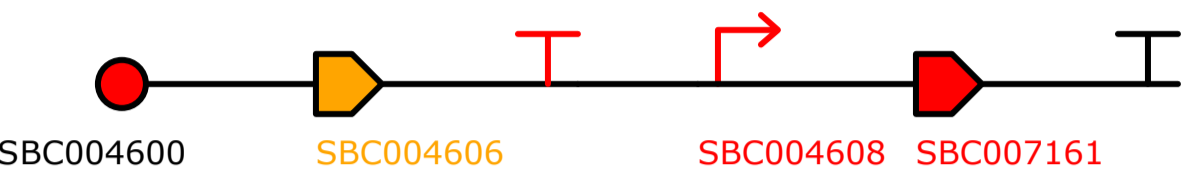
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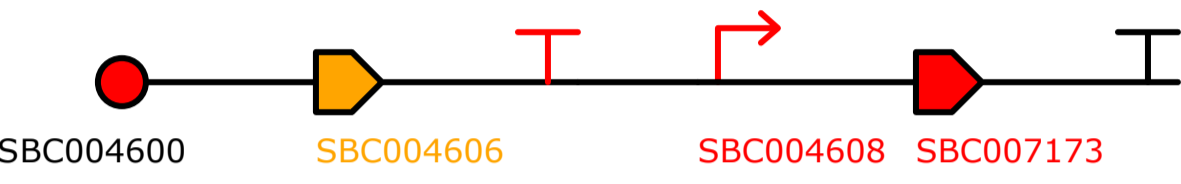
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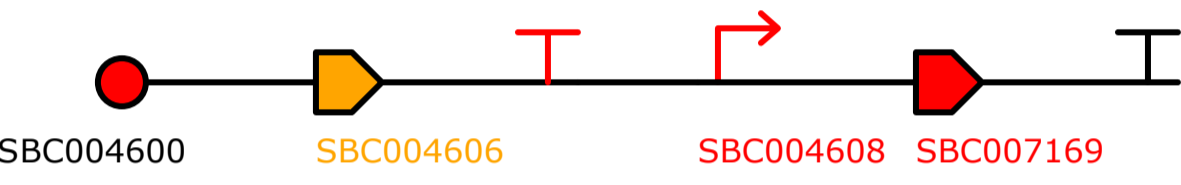
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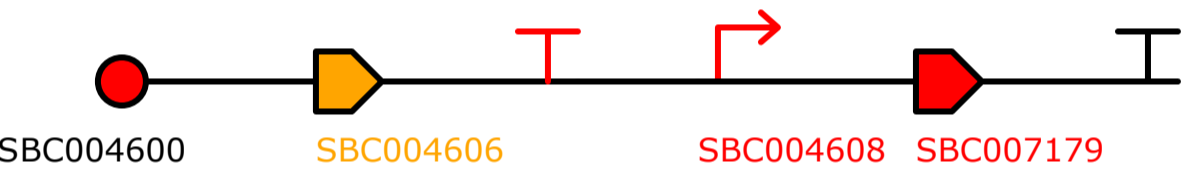
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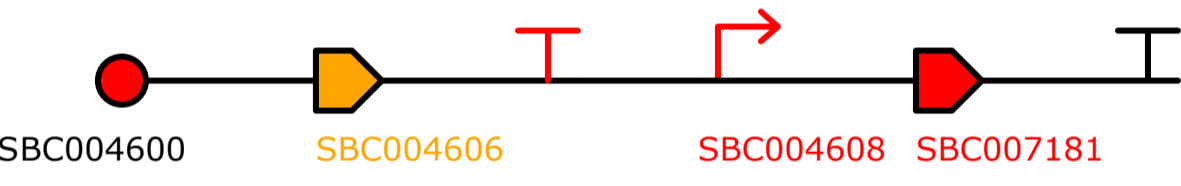
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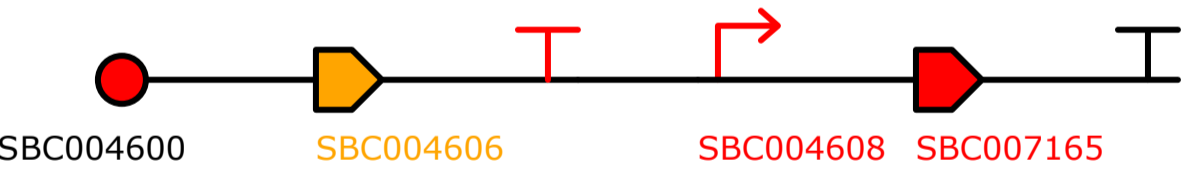
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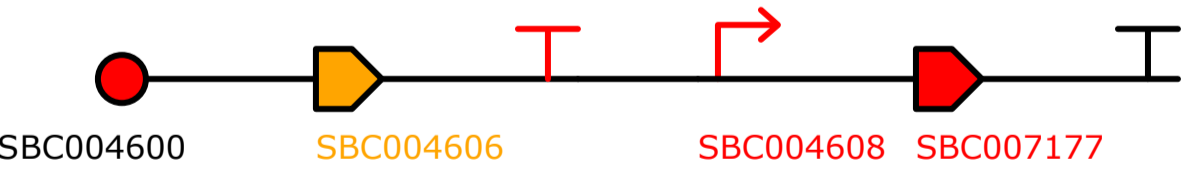
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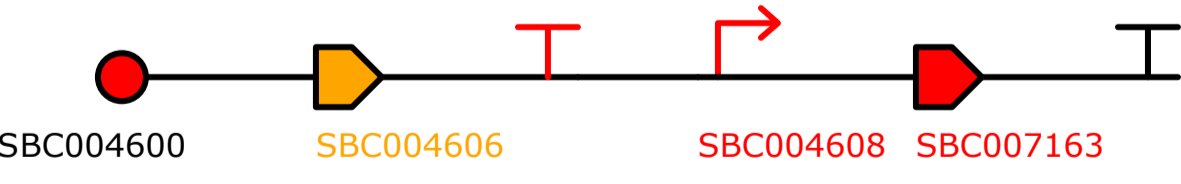
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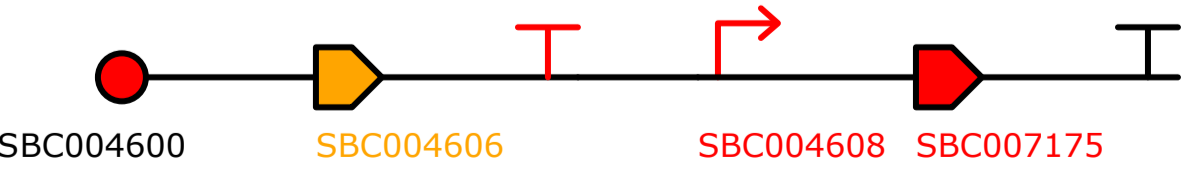
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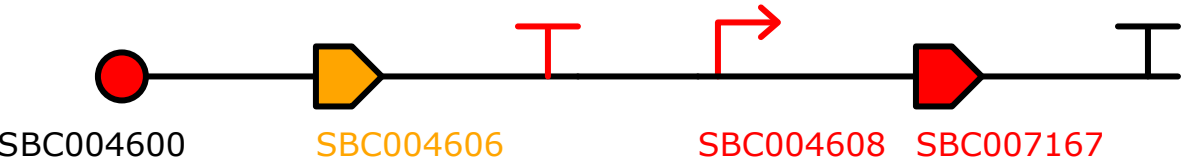
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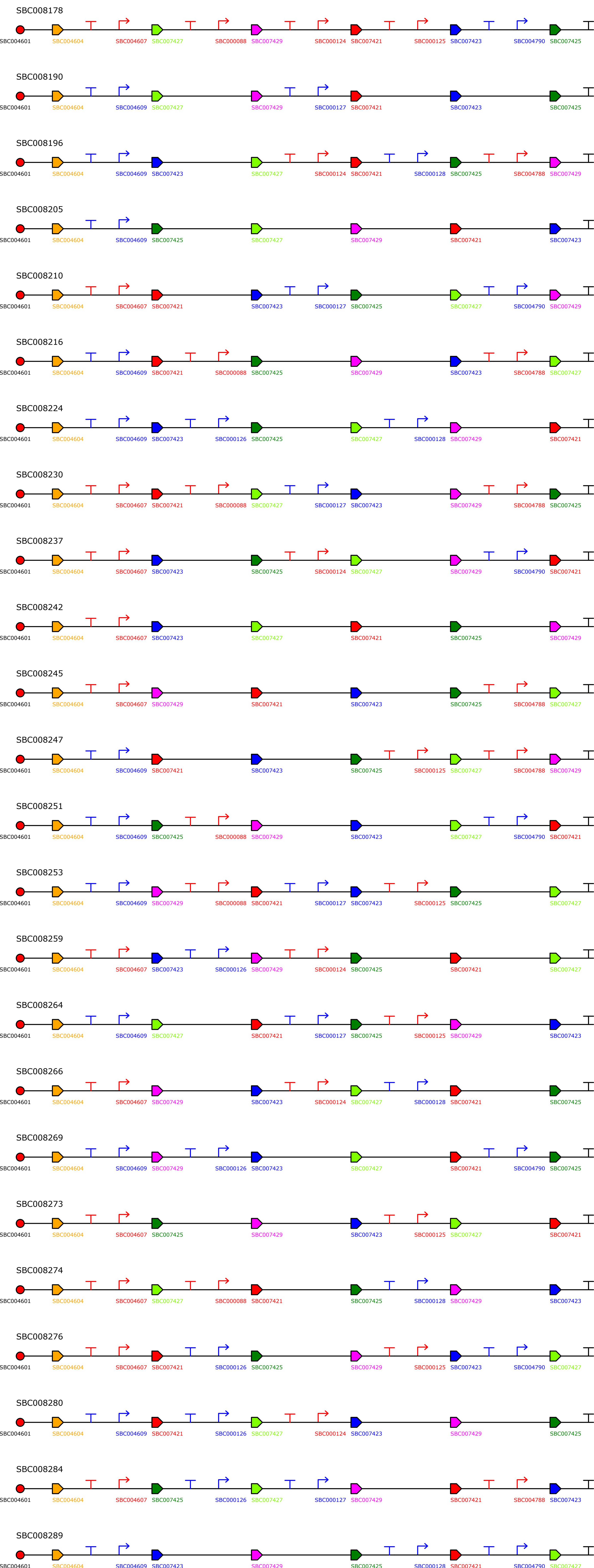
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SBC007182

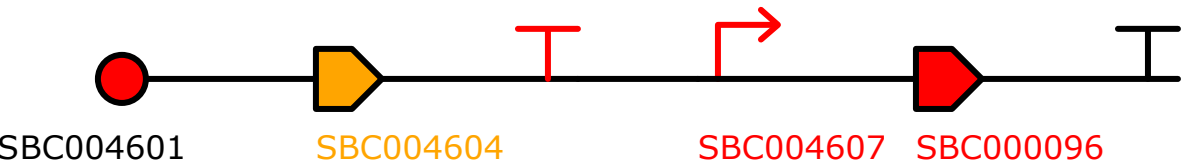


Design DE33

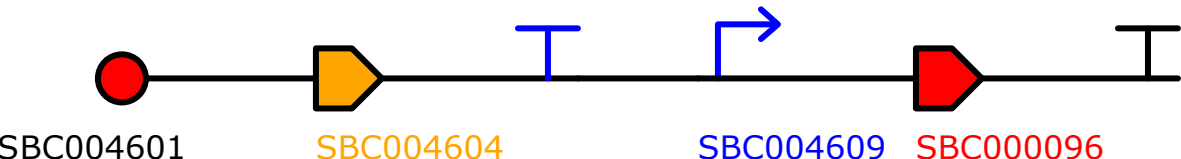


Design DE36

SBC007575

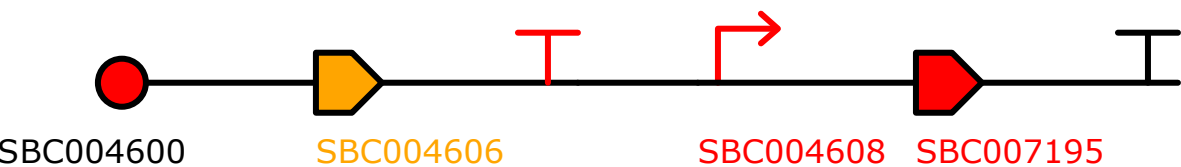


SBC007580

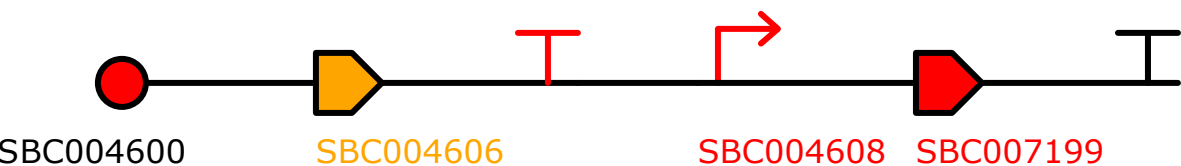


Design DE37

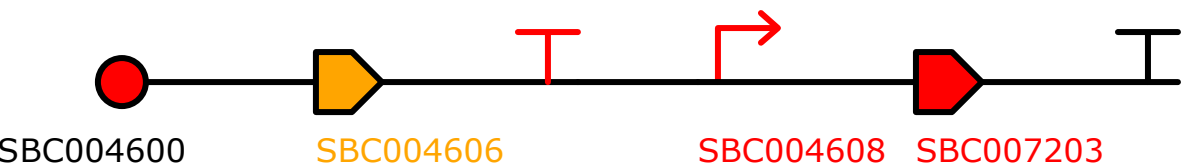
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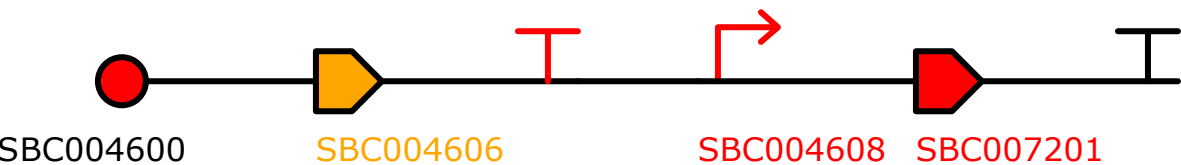
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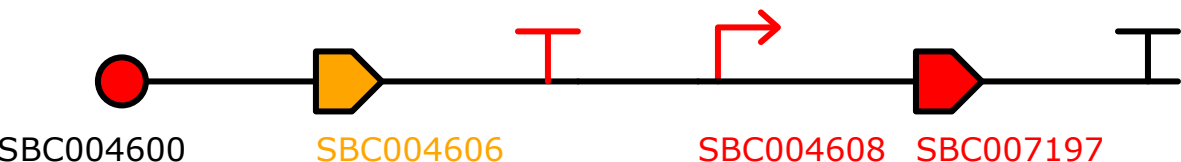
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SBC007201

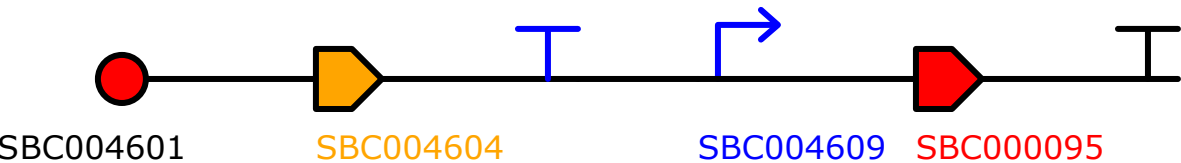


SBC007203

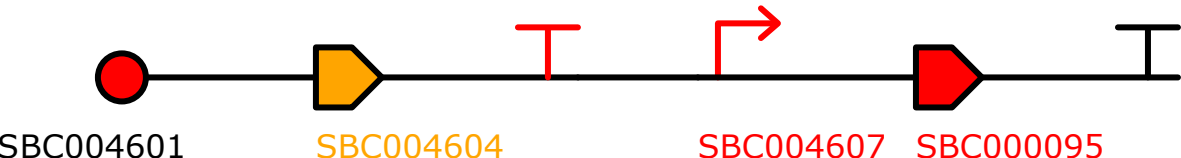


Design DE38

SBC007583

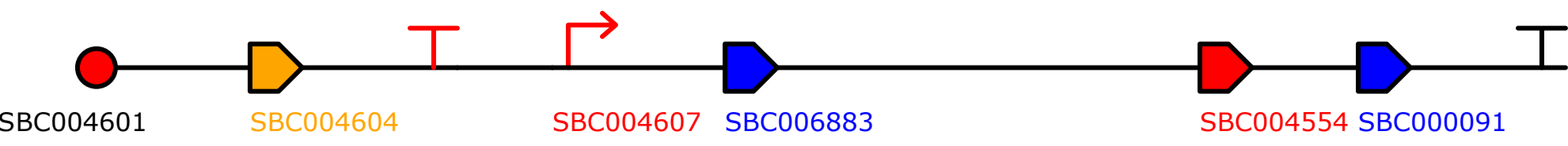


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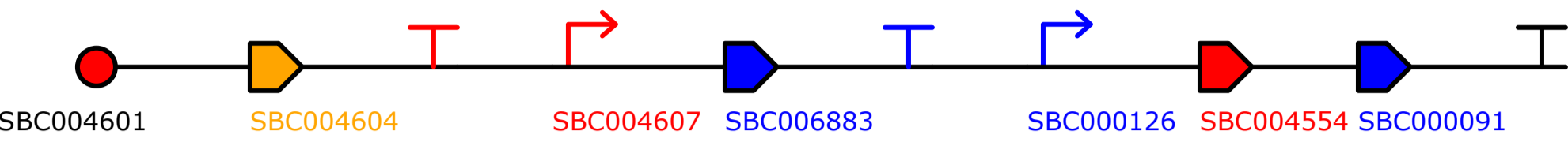


Design DE39

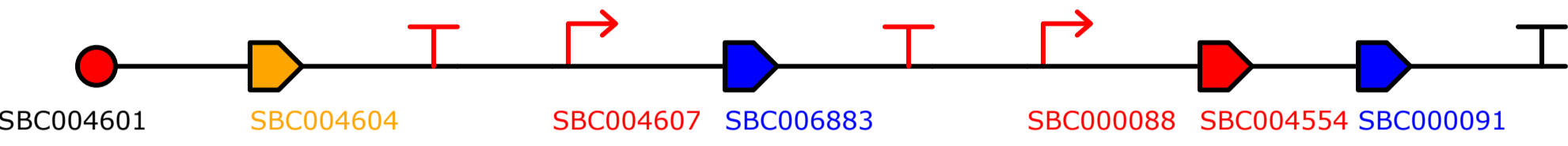
SBC007592



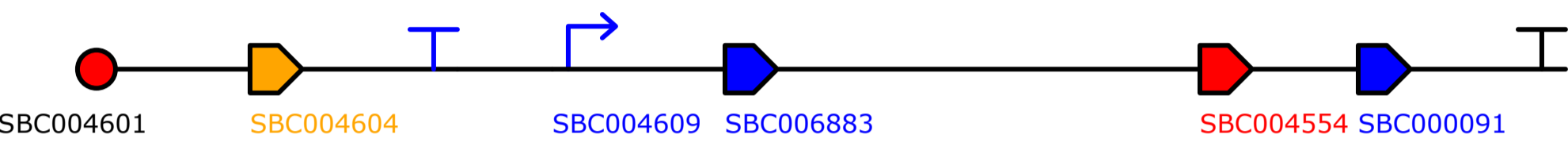
SBC007600



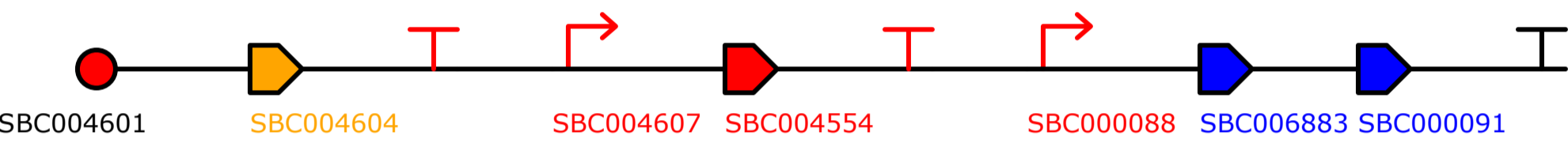
SBC007604



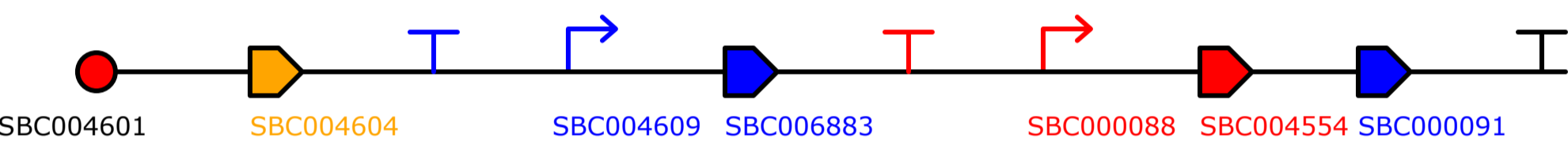
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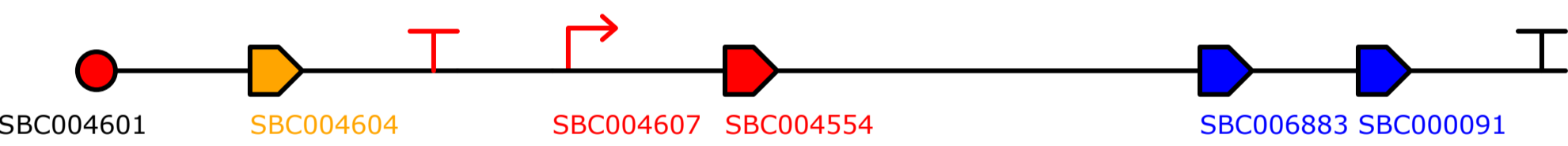
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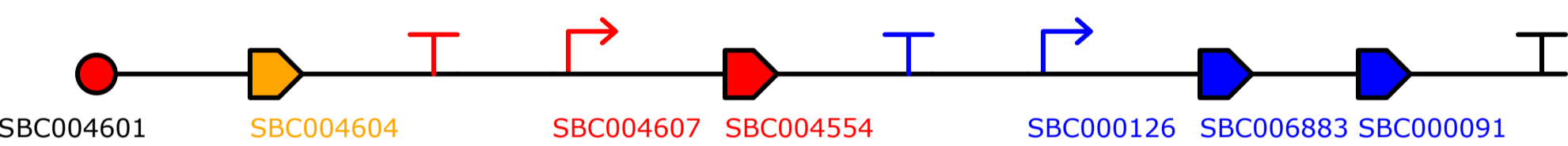
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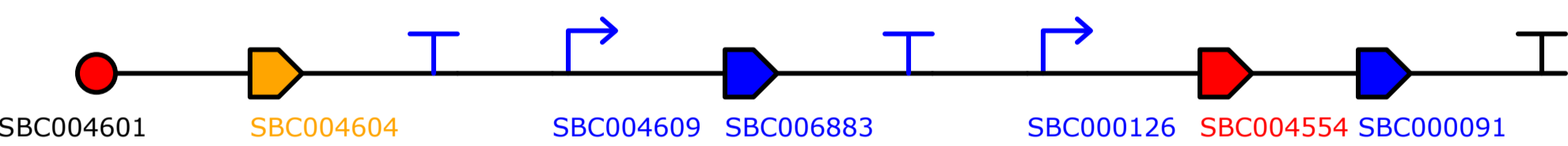
SBC007619



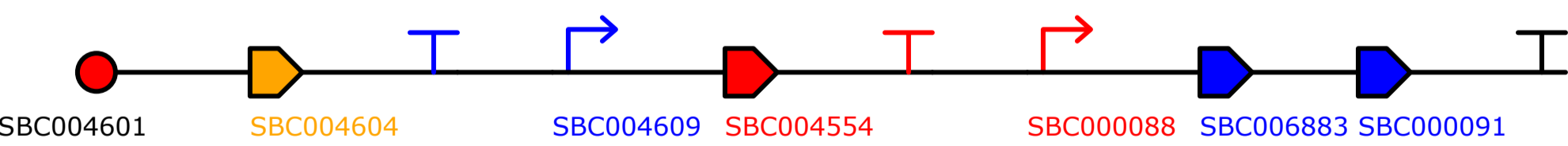
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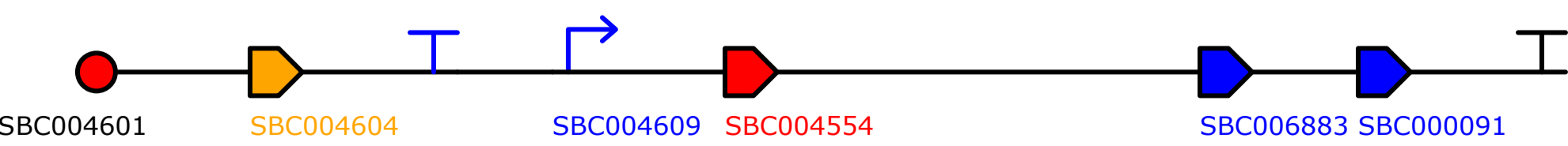
SBC007626



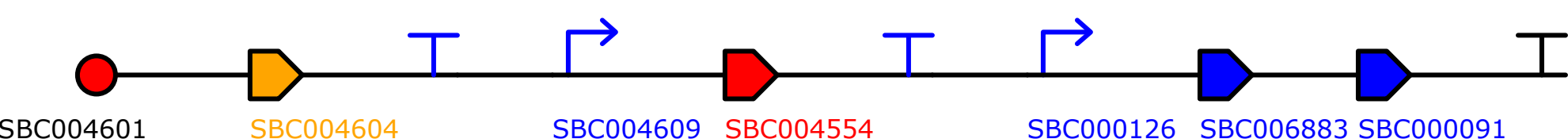
SBC007628



SBC007630

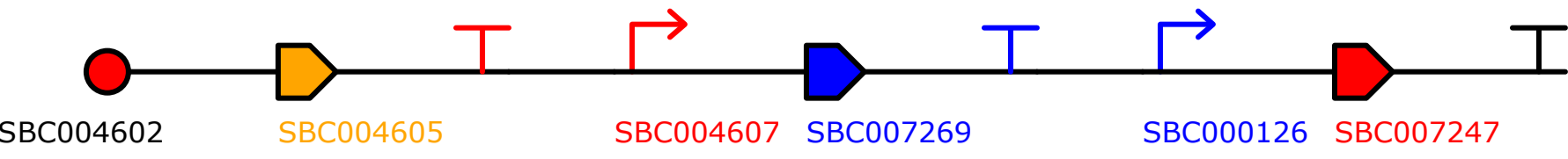


SBC007632

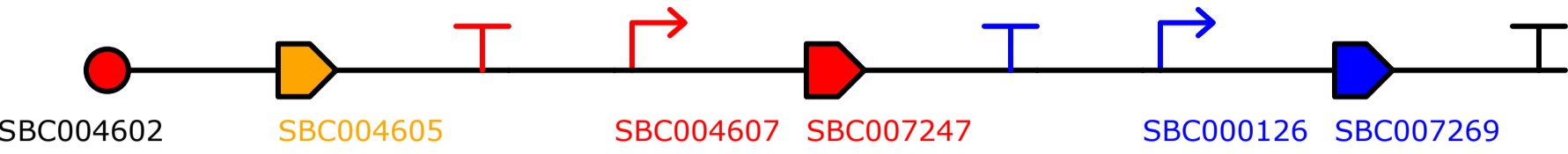


Design DE42

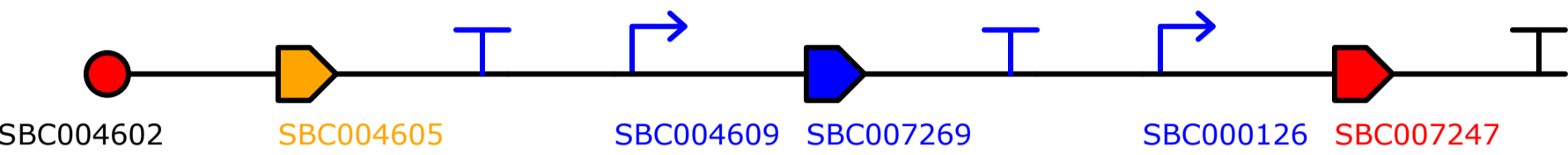
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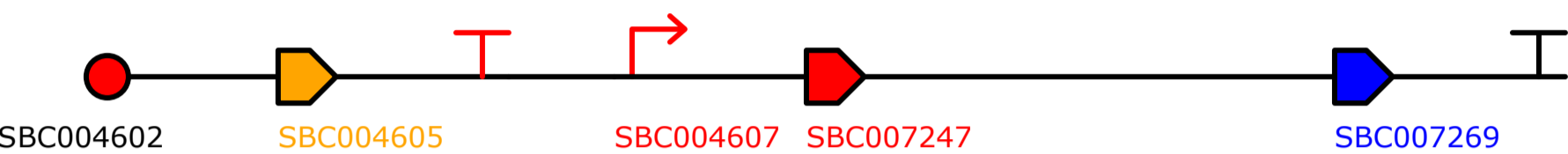
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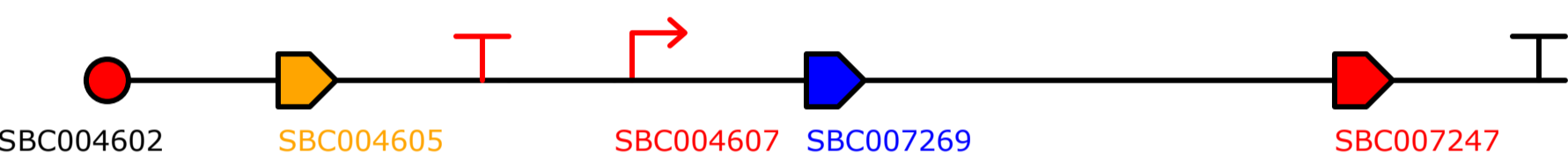
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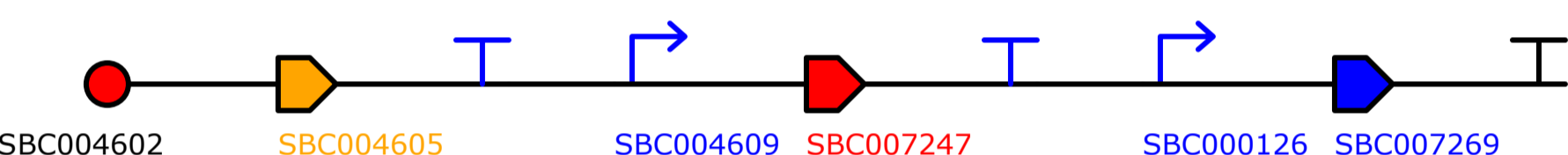
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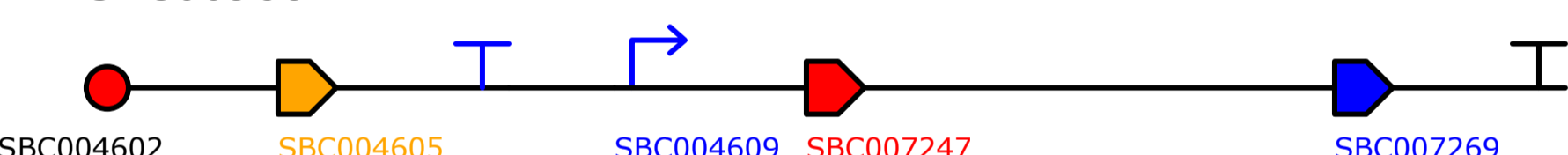
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SBC009880



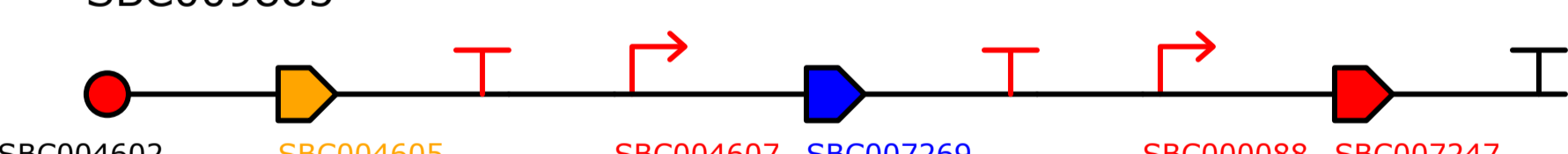
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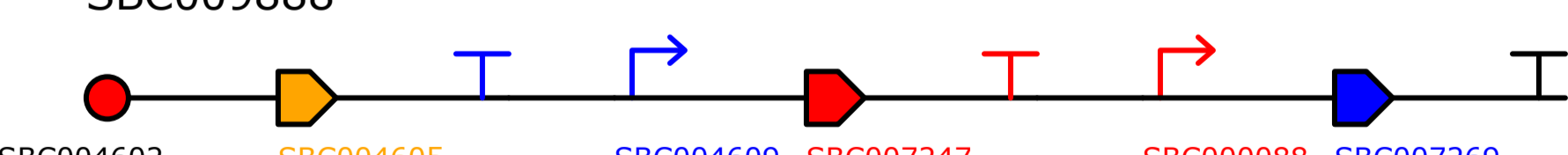
SBC009882



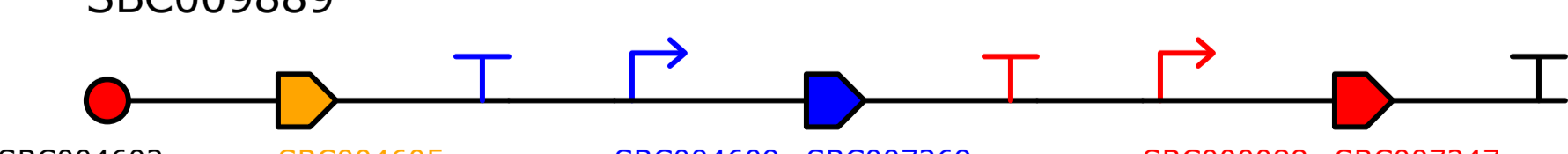
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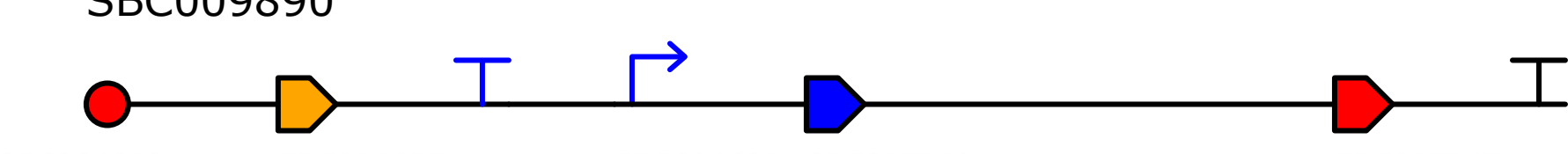
SBC009888



SBC009889

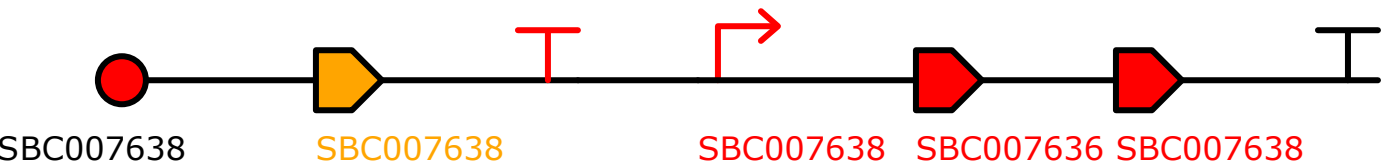


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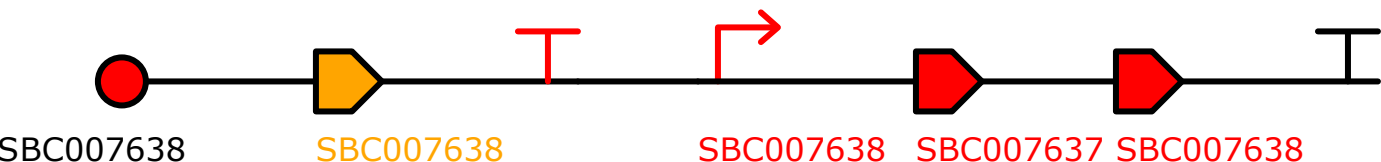


Design DE45

SBC007639

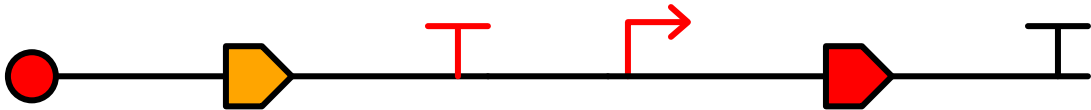


SBC007641



Design DE49

SBC010238



SBC004602

SBC004604

SBC004609

SBC007171