**Supplementary Table S1** pCMV-3UTR cloning site enzymes and alternative cloning possibilities

| pCMV-3UTR cloning site enzyme | Isoschizomers | Compatible sticky ends* | Recognition sequences |
|---|---|---|---|
| AgeI<br>5'...A•CCGG T...3'<br>3'...T GGCC•A...5' | AsiGI, BshTI,<br><br>CspAI, PinAI | AccIII, Aor13HI, BseAI, Bsp13I, BspEI, Kpn2I, MroI | 5'...T•CCGG A...3'<br>3'...A GGCC•T...5' |
| | | Cfr9I, TspMI, XmaI, XmaCI | 5'...C•CCGG G...3'<br>3'...G GGCC•C...5' |
| | | MroNI, NgoMIV | 5'...G•CCGG C...3'<br>3'...C GGCC•G...5' |
| | | BsaWI | 5'...W•CCGG W...3'<br>3'...W GGCC•W...5' |
| | | Bse118I, BsrFI, BssAI, Cfr10I | 5'...R•CCGG Y...3'<br>3'...Y GGCC•R...5' |
| | | MreI | 5'...CG•CCGG CG...3'<br>3'...GC GGCC•GC...5' |
| | | SgrAI | 5'...CR•CCGG YG...3'<br>3'...GY GGCC•RC...5' |
| SpeI<br>5'...A•CTAG T...3'<br>3'...T GATC•A...5' | AhlI, BcuI | AspA2I, AvrII, BlnI, XmaJI | 5'...C•CTAG G...3'<br>3'...G GATC•C...5' |
| | | AsuNHI, NheI | 5'...G•CTAG C...3'<br>3'...C GATC•G...5' |
| | | XbaI | 5'...T•CTAG A...3'<br>3'...A GATC•T...5' |
| EcoRI<br>5'...G•AATT C...3'<br>3'...C TTAA•G...5' | | MluCI, Sse9I, TasI, Tsp509I, TspEI | 5'...•AATT ...3'<br>3'... TTAA•...5' |
| | | MfeI, MunI | 5'...C•AATT G...3'<br>3'...G TTAA•C...5' |
| | | AcsI, ApoI, XapI | 5'...R•AATT Y...3'<br>3'...Y TTAA•R...5' |
| XhoI<br>5'...C•TCGA G...3'<br>3'...G AGCT•C...5' | PaeR7I,<br><br>Sfr274I, SlaI | Ama87I, AvaI, BmeT110I, BsiHKCI, BsoBI, Eco88I, SmlI, SmoI | 5'...C•TCGA G...3'<br>3'...G AGCT•C...5' |
| | | SalI | 5'...G•TCGA C...3'<br>3'...C AGCT•G...5' |
| | | SgrDI | 5'...CG•TCGA CG...3'<br>3'...GC AGCT•GC...5' |
| | | AbsI | 5'...CC•TCGA GG...3'<br>3'...GG AGCT•CC...5' |
| | | PspXI | 5'...VC•TCGA GB...3'<br>3'...BG AGCT•CV...5' |

* from the SnapGene Viewer v7.0.1 (SnapGene software (www.snapgene.com)) enzyme database

B = C or G or T
R = A or G
V = A or C or G
W = A or T
Y = C or T