**Table 4. *SynX* minichunk plasmid**.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Minichunks | Length  (bp) | Synthetic coordinates | | Restriction enzyme cutting site | | Resistance plasmid |
| start(bp) | end(bp) | 5' | 3' |
| yeast\_chr10\_3\_33.A-1 | 2364 | 1 | 2364 | SapI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-2 | 4939 | 1965 | 6903 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-3 | 4939 | 6504 | 11442 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-4 | 4939 | 11043 | 15981 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-5 | 4939 | 15582 | 20520 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-6 | 4939 | 20121 | 25059 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-7 | 4939 | 24660 | 29598 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-8 | 4939 | 29199 | 34137 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-9 | 4939 | 33738 | 38676 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.A-10 | 4218 | 38277 | 41382 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-1 | 4600 | 40468 | 45067 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-2 | 4600 | 44668 | 49267 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-3 | 4600 | 48868 | 53467 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-4 | 4600 | 53068 | 57667 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-5 | 4600 | 57268 | 61867 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-6 | 4600 | 61468 | 66067 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-7 | 4600 | 65668 | 70267 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-8 | 4600 | 69868 | 74467 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.B-9 | 4853 | 74068 | 77157 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-1 | 4984 | 76250 | 81233 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-2 | 4984 | 80834 | 85817 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-3 | 4984 | 85418 | 90401 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-4 | 4984 | 90002 | 94985 | NotI | NotI | pUC57 (Kan) |
| yeast\_chr10\_3\_33.C-5 | 4984 | 94586 | 99569 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-6 | 4984 | 99170 | 104153 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-7 | 4984 | 103754 | 108737 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-8 | 4984 | 108338 | 113321 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.C-9 | 4984 | 112922 | 116793 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-1 | 4800 | 115879 | 120678 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-2 | 4800 | 120279 | 125078 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-3 | 4800 | 124679 | 129478 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-4 | 4800 | 129079 | 133878 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-5 | 4800 | 133479 | 138278 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-6 | 4800 | 137879 | 142678 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-7 | 4800 | 142279 | 147078 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-8 | 4800 | 146679 | 151478 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-9 | | 4800 | 151079 | 155878 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.D-10 | | 4034 | 155479 | 157749 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-1 | | 4850 | 156835 | 161684 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-2 | | 4850 | 161285 | 166134 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-3 | | 4850 | 165735 | 170584 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-4 | | 4850 | 170185 | 175034 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-5 | | 4850 | 174635 | 179484 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-6 | | 4850 | 179085 | 183934 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-7 | | 4850 | 183535 | 188384 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.E-8 | | 4849 | 187985 | 191739 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-1 | | 4800 | 190835 | 195634 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-2 | | 4800 | 195235 | 200034 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-3 | | 4800 | 199635 | 204434 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-4 | | 4800 | 204035 | 208834 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-5 | | 4800 | 208535 | 213334 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-6 | | 4800 | 213035 | 217834 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-7 | | 4800 | 217435 | 222234 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-8 | | 4800 | 221835 | 226634 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-9 | | 4800 | 226235 | 231034 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-10 | | 4800 | 230635 | 235434 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.F-11 | | 3913 | 235035 | 237184 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-1 | | 4600 | 236281 | 240880 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-2 | | 4600 | 240481 | 245080 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-3 | | 4600 | 244681 | 249280 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-4 | | 4600 | 248881 | 253480 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-5 | | 4600 | 253081 | 257680 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-6 | | 4600 | 257281 | 261880 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-7 | | 4600 | 261481 | 266080 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-8 | | 4600 | 265681 | 270280 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.G-9 | | 4644 | 269881 | 273426 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-1 | | 4700 | 272512 | 277211 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-2 | | 4700 | 276812 | 281511 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-3 | | 4700 | 281112 | 285811 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-4 | | 4700 | 285412 | 290111 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-5 | | 4700 | 289712 | 294411 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-6 | | 4700 | 294012 | 298711 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-7 | | 4700 | 298312 | 303011 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-8 | | 4700 | 302612 | 307311 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.H-9 | | 4805 | 306912 | 309934 | SacI | SacI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-1 | | 4700 | 309024 | 313723 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-2 | | 4700 | 313324 | 318023 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-3 | | 4700 | 317624 | 322323 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-4 | | 4700 | 321924 | 326623 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-5 | | 4700 | 326224 | 330923 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-6 | | 4700 | 330524 | 335223 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-7 | | 4700 | 334824 | 339523 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-8 | | 4700 | 339124 | 343823 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.I-9 | | 4623 | 343424 | 346968 | NotI | NotI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.J-1 | | 4970 | 346065 | 351034 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.J-2 | | 4970 | 350635 | 355604 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.J-3 | | 4970 | 355205 | 360174 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.J-4 | | 4970 | 359775 | 364744 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.J-5 | | 4970 | 364345 | 369314 | SacI | SacI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.J-6 | | 4970 | 368915 | 373884 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.J-7 | | 4970 | 373485 | 378454 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.J-8 | | 4970 | 378055 | 383024 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.J-9 | | 4970 | 382625 | 387594 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.J-10 | | 4794 | 387195 | 390191 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.K-1 | | 4500 | 389281 | 393780 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.K-2 | | 4500 | 393381 | 397880 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.K-3 | | 4500 | 397481 | 401980 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.K-4 | | 4500 | 401581 | 406080 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.K-5 | | 4700 | 405681 | 410380 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.K-6 | | 4700 | 409981 | 414680 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.K-7 | | 4800 | 414281 | 419080 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.K-8 | | 4700 | 418681 | 423380 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.K-9 | | 4516 | 422981 | 427496 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.K-10 | | 2759 | 427097 | 428760 | NotI | NotI | pMK-RQ (Kan) |
| yeast\_chr10\_3\_33.L-1 | | 4700 | 427855 | 432554 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.L-2 | | 4700 | 432155 | 436854 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.L-3 | | 4700 | 436455 | 441154 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.L-4 | | 4700 | 440755 | 445454 | NotI | NotI | pOK (Kan) |
| yeast\_chr10\_3\_33.L-5 | | 4700 | 445055 | 449754 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.L-6 | | 4700 | 449355 | 454054 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.L-7 | | 4700 | 453655 | 458354 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.L-8 | | 4700 | 457955 | 462654 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.L-9 | | 4700 | 462255 | 466954 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.L-10 | | 4544 | 466555 | 469319 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.M-1 | | 4600 | 468409 | 473008 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.M-2 | | 4600 | 472609 | 477208 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.M-3 | | 4600 | 476809 | 481408 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.M-4 | | 4600 | 481009 | 485608 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.M-5 | | 4600 | 485209 | 489808 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.M-6 | | 4600 | 489409 | 494008 | BamHI | BamHI | pMA (Amp) |
| yeast\_chr10\_3\_33.M-7 | | 4600 | 493609 | 498208 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.M-8 | | 4600 | 497809 | 502408 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.M-9 | | 4478 | 502009 | 505408 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.N-1 | | 4700 | 504498 | 509197 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.N-2 | | 4700 | 508798 | 513497 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.N-3 | | 4700 | 513098 | 517797 | NotI | NotI | pOA (Amp) |
| yeast\_chr10\_3\_33.N-4 | | 4700 | 517398 | 522097 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.N-5 | | 4700 | 521698 | 526397 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.N-6 | | 4700 | 525998 | 530697 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.N-7 | | 4700 | 530298 | 534997 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.N-8 | | 4700 | 534598 | 539297 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.N-9 | | 4700 | 538898 | 543597 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.N-10 | | 4813 | 543198 | 546213 | NotI | NotI | pMS (Spc) |
| **\*yeast\_chr10\_3\_34.O-1** | | 5464 | 545299 | 550753 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.O-2 | | 4750 | 550354 | 555103 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.O-3 | | 4750 | 554704 | 559453 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.O-4 | | 4750 | 559054 | 563803 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.O-5 | | 4750 | 563404 | 568153 | NotI | NotI | pMA (Amp) |
| **\*yeast\_chr10\_3\_35.O-6** | | 4750 | 567754 | 572503 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.O-7 | | 4750 | 572104 | 576853 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.O-8 | | 4750 | 576454 | 581203 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.O-9 | | 4697 | 580804 | 584422 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.P-1 | | 4850 | 583512 | 588361 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-2 | | 4850 | 587962 | 592811 | NotI | NotI | pOK (Kan) |
| yeast\_chr10\_3\_33.P-3 | | 4850 | 592412 | 597261 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-4 | | 4850 | 596862 | 601711 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-5 | | 4850 | 601312 | 606161 | XhoI | XhoI | pUC57 (Amp) |
| yeast\_chr10\_3\_33.P-6 | | 4850 | 605762 | 610611 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-7 | | 4850 | 610212 | 615061 | NotI | NotI | pMS (Spc) |
| **\*yeast\_chr10\_3\_36.P-8** | | 4816 | 614662 | 619477 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-9 | | 4850 | 619078 | 623927 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-10 | | 4850 | 623528 | 628377 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.P-11 | | 4814 | 627978 | 630994 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.Q-1 | | 4900 | 630080 | 634979 | SacI | SacI | pMK (Kan) |
| yeast\_chr10\_3\_33.Q-2 | | 4900 | 634580 | 639479 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.Q-3 | | 4900 | 639080 | 643979 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.Q-4 | | 4900 | 643580 | 648479 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.Q-5 | | 4900 | 648080 | 652979 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.Q-6 | | 4900 | 652580 | 657479 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.Q-7 | | 4900 | 657080 | 661979 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.Q-8 | | 4900 | 661580 | 666479 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.Q-9 | | 4900 | 666080 | 670979 | NotI | NotI | pOK (Kan) |
| yeast\_chr10\_3\_33.Q-10 | | 4947 | 670580 | 674448 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.R-1 | | 4600 | 673543 | 678142 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.R-2 | | 4600 | 677072 | 681671 | NotI | NotI | pMS (Spc) |
| yeast\_chr10\_3\_33.R-3 | | 4600 | 681272 | 685871 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.R-4 | | 4600 | 685472 | 690071 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.R-5 | | 4600 | 689672 | 694271 | NotI | NotI | pMK (Kan) |
| yeast\_chr10\_3\_33.R-6 | | 4600 | 693872 | 698471 | NotI | NotI | pMA (Amp) |
| yeast\_chr10\_3\_33.R-7 | | 4600 | 698072 | 702671 | NotI | NotI | pOA (Amp) |
| yeast\_chr10\_3\_33.R-8 | | 4517 | 702272 | 707459 | SapI | SapI | pMA (Amp) |

\* The sequences of these minichunks were updated after the debugging process.