## Supplementary Table 20 - List of NeoChr25 (linear) and NeoChr26 (circular) chromosome parts

#The +, - or 0 signifies the orientation of the part with respect to the neochromosome

\* Size of the fragments does not include the SHR sequences.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SHR Fw | Component# | SHR Rv | Size\* | Template | Primer Fw | Primer Rv |
| Unique to NeoChr25 | | | | | | |
|  | Left TeSS (0) | BJ | 813 | pLM092 | 13395 | 16577 |
| Common to Neochr25 and NeoChr26 | | | | | | |
| BJ | chunk 7BC (0) | BL | 4909 | *E.coli* (migula) Castellani and Chalmers (ATCC 47076) | 11536 | 11539 |
| BL | ARS1 (0) | AN | 56 | Annealing of complementary primers | 16578 | 9989 |
| AN | ZWF1 (+) | BP | 2623 | pUDC275 | 16526 | 16527 |
| BP | TKL1 (+) | DE | 3148 | pUDC276 | 16528 | 16529 |
| DE | GND1 (+) | BQ | 2575 | pUDC277 | 16530 | 16531 |
| BQ | RKI1 (-) | BR | 1882 | pUDC278 | 16532 | 16533 |
| BR | TAL1 (-) | AL | 2113 | pUDC279 | 16534 | 16535 |
| AL | mTurqouise2 (-) | DS | 1683 | pUDC192 | 13432 | 13433 |
| DS | RPE1 (-) | DF | 1822 | pUDC280 | 16536 | 16537 |
| DF | SOL3 (-) | DI | 1855 | pUDC281 | 16538 | 16539 |
| DI | ARS417 (0) | BE | 64 | Annealing of complementary primers | 16579 | 16580 |
| BE | aroGfbr (+) | DK | 2089 | pUDC298 | 16540 | 16541 |
| DK | aroB (+) | AC | 2104 | pUDC294 | 16542 | 16543 |
| AC | mRuby2 (+) | AD | 1667 | pUDC191 | 11365 | 11366 |
| AD | aroD (+) | DM | 1931 | pUDC296 | 16544 | 16545 |
| DM | aroE (+) | DN | 1860 | pUDC297 | 16546 | 16547 |
| DN | aroL (+) | DO | 1534 | pUDC299 | 16548 | 16549 |
| DO | aroA (+) | DP | 2718 | pUDC293 | 16550 | 16551 |
| DP | aroC (-) | DQ | 1746 | pUDC295 | 16552 | 16553 |
| DQ | tyrAfbr (-) | DR | 1874 | pUDC301 | 16554 | 16555 |
| DR | pheAfbr (-) | AJ | 2171 | pUDC300 | 16556 | 16557 |
| AJ | tyrB (-) | DH | 2499 | pUDC302 | 16558 | 16559 |
| DH | chunk 15CD (0) | DJ | 4996 | *E.coli* (migula) Castellani and Chalmers (ATCC 47076) | 13410 | 13413 |
| DJ | CEN6/ARS4 (0) | AE | 519 |  | 13414 | 9991 |
| AE | chunk 16AB (0) | DL | 5019 | *E.coli* (migula) Castellani and Chalmers (ATCC 47076) | 13415 | 16560 |
| DL | FBA1 (+) | H | 2185 | pUDC212 | 16561 | 16562 |
| H | TPI1 (+) | P | 1856 | pUDC222 | 12957 | 12958 |
| P | PGK1 (+) | Q | 2356 | pUDC219 | 16563 | 16564 |
| Q | ADH1 (+) | N | 2152 | pUDC229 | 16565 | 16566 |
| N | PYK1 (+) | O | 2612 | pUDC220 | 12963 | 12964 |
| O | TDH3 (+) | A | 2104 | pUDC230 | 16567 | 16568 |
| A | ENO2 (+) | B | 2423 | pUDC231 | 12967 | 13227 |
| B | HXK2 (-) | C | 2566 | pUDC214 | 16569 | 16570 |
| C | PGI1 (-) | D | 2774 | pUDC232 | 12972 | 12971 |
| D | PFK1 (-) | J | 4069 | pUDC216 | 16571 | 16572 |
| J | PFK2 (-) | BU | 3989 | pUDC217 | 12976 | 13900 |
| BU | HIS3 (-) | L | 1254 | pLM092 | 16573 | 16574 |
| L | GPM1 (-) | M | 1853 | pUDC213 | 12980 | 12979 |
| M | PDC1 (-) | AR | 2797 | pUDC215 | 16575 | 16576 |
| AR | ARS1211 (0) | BS | 251 | *S. cerevisiae* CEN.PK113-7D | 12983 | 13901 |
| BS | chunk 9CD (0) | AQ | 4994 | *E.coli* (migula) Castellani and Chalmers (ATCC 47076) | 11519 | 11522 |
| Unique to NeoChr25 | | | | | | |
| AQ | right TeSS (0) |  | 807 | pLM092 | 16581 | 13435 |
| Unique to NeoChr26 | | | | | | |
| AQ | telomerator (+) | BJ | 1620 | pLM092 | 16581 | 16577 |