

SI Table 1. Summary of chromosome walking steps.

| BAC clone ID (HNB) * | Probe used for library screening | Method of library screening [†] | Insert size (kb) [‡] | BAC end properties [§] | Derived marker and its source in parentheses [¶] |
|----------------------|----------------------------------|--|-------------------------------|---------------------------------|---|
| 1 506B03 | sKT9 | PCR | 85 | lc/rep | BK91 (BAC F end), BK93 (<i>Bam</i> H I subcloning) |
| 2 225H15 | sKT9 | PCR | 110 | lc/rep | |
| 3 216M18 | BK91 | PCR | 125 | rep/lc | |
| 4 222C16 | BK91 | PCR | 150 | lc/rep | |
| 5 370O10 | BK91 | PCR | 105 | lc/rep | |
| 6 549K03 | BK93 | PCR | 105 | both rep | |
| 7 100N15 | ABRS3 | PCR | 109 | both rep | |
| 8 106O20 | ABRS3 | PCR | 64 | rep/lc | wHNB322 (BAC R end) |
| 9 615N19 | ABRS3 | PCR | 116 | both rep | |
| 10 624K08 | ABRS3 | PCR | 113 | both rep | |
| 11 652H03 | ABRS3 | PCR | 114 | rep/lc | wHNB352 (BAC R end) |
| 12 629A14 | ABRS3 | PCR | 105 | both rep | |
| 13 520D05 | wHNB352 | HYB | 104 | lc/rep | wHNB371 (BAC F end) |
| 14 589B20 | wHNB352 | HYB | 132 | both rep | sHNB386 (<i>Acc</i> I subcloning) |
| 15 035P04 | sHNB386 | PCR | 98 | lc/rep | HNB391 (BAC F end) |
| 16 058D05 | HNB391 | PCR | 89 | both rep | |
| 17 233N01 | HNB391 | PCR | 94 | both lc | HNB3112 (BAC R end), HNB3115 and HNB3116 (both BAC sequence data) |
| 18 421N15 | HNB391 | PCR | 119 | not analyzed | |
| 19 526E13 | HNB391 | PCR | 100 | not analyzed | |
| 20 526K03 | HNB391 | PCR | 100 | not analyzed | |

*Haruna Nijo BAC (HNB) clone ID name. Clones subjected to sequencing were marked in yellow; other critical BAC clones shown in Fig. 2A were marked in blue.

[†]HYB indicates hybridization to high-density colony membrane; PCR indicates PCR screening.

[‡]The insert size was estimated using pulse field gel electrophoresis, except for three clones (106O20, 035P04 and 233N01), which were completely shotgun-sequenced.

[§]BAC orientation is F end/ R end based on the M13 sequencing primers; lc indicates low copy, and rep indicates repetitive sequence.

[¶]BAC end indicates BAC end sequencing; the letter F or R denotes the BAC insert end side from which the marker was developed.