**Table S1** Recombination test using the RDP program

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **recombinant sequence** | **Breakpoint Positions** | **Major parent** | **Minor parent** | **Methods** |
| **Begin End** |
| 1 | *Mafa-A1\*036:04* | 305 521\* | *Mafa-A1\*057:01* | *Mafa-A1\*091:02* | B M C S T |
| 2 | *Mafa-A1\*043:01* | 290 517\* | *Mafa-A4\*14:09* | *Mafa-A1\*032:03:02* | B M C S |
| 3 | *Mafa-A1\*079:02* | 16\* 210 | *Mafa-A1\*066:06* | *Mafa-A3\*13:02* | M C S T |
| 4 | *Mafa-B\*001:01:01* | 16\* 184 | *Mafa-B\*015:03* | *Mafa-B\*021:02* | B M S T |

\* means the actual breakpoint position is undetermined.

G: GENECONV, B: BootScan, M: MaxChi, C: Chimaera, S: SiScan, T: 3Seq.