

| BAC | Marker | Marker origin | Dist. to RJM marker (cM) | Chrom. | Bin | Physical position | | | Type of region |
|--------------------------|---------------------|-----------------|-----------------------------|--------|------|---------------------------|---------------------------------|-------------------------------------|---|
| | | | | | | IBM2 map position (cM) | From S chrom. tip (μ m) | Chrom. fraction from cent. (cMC) | |
| <i>Knob 1S</i> | <i>umc157a(chn)</i> | <i>MaizeGDB</i> | <i>n.a.</i> | 1S | 1.02 | 114.4 | 3 | 86 | |
| AC147789 | umc1076 | FPC | n.a. | 1S | 1.05 | 440.0 | 10.6 | 51 | |
| AC147789 | umc1972 | IBM mapping | 15.4 | 1S | 1.06 | 503.3 | 14.8 | 31 | Not pericentromere, not periknob |
| AC147789 | asg58 | IBM mapping | 43.1 | 1S | 1.06 | 525.7 | 16.2 | 25 | |
| Centromere | Cent1 | MaizeGDB | n.a. | 1 | 1.06 | 566.3 | 21.6 | 0 | |
| AC148172 | umc2054 | FPC | n.a. | 4S | 4.05 | 291.5 | 13.6 | 1 | Pericentromere |
| Centromere | Cent4 | MaizeGDB | n.a. | 4 | 4.05 | 295.2 | 13.8 | 0 | |
| AC148161 | umc1935 | FPC | n.a. | 5S | 5.03 | 267.7 | 7.8 | 54 | Not pericentromere, not periknob |
| Centromere | Cent5 | MaizeGDB | n.a. | 5 | 5.04 | 330.8 | 17.0 | 0 | |
| AC148159 | umc126a | FPC | n.a. | 5L | 5.06 | 469.9 | 31.3 | 76 | Not pericentromere, close to knob 5L |
| Knob 5L | klp5 | MaizeGDB | n.a. | 5L | 5.07 | 555.5 | 33.3 | 87 | |
| Centromere | Cent6 | MaizeGDB | n.a. | 6 | 6.01 | 71.1 | 8.1 | 0 | |
| AC147809 | bnlg1867 | IBM mapping | 4.9 | 6L | 6.01 | 78.3 | 10.3 | 10 | |
| AC147809 | umc2313 | FPC | n.a. | 6L | 6.01 | 91.9 | 11.9 | 18 | |
| <i>Knob 6L1</i> | <i>y1</i> | <i>MaizeGDB</i> | <i>n.a.</i> | 6L | 6.01 | 120.5 | 13.9 | 27 | |
| AC147809 | umc1006 | IBM mapping | 4.6 | 6L | 6.02 | 125.0 | 14.7 | 31 | |
| <i>Knobs 6L2 and 6L3</i> | <i>pl1</i> | <i>MaizeGDB</i> | <i>n.a.</i> | 6L | 6.04 | 211.5 | 19.3 | 52 | Not pericentromere, close to the 6L1 knob present in some Latin American races of maize but absent in B73 |
| <i>Knob 7S</i> | <i>umc2177</i> | <i>MaizeGDB</i> | <i>n.a.</i> | 7S | 7.00 | 0 | 0.8 | 90 | |
| AC148081 | AY110576 | FPC | n.a. | 7S | 7.02 | 176.8 | 4.4 | 43 | |
| AC148081 | phi034/cyp6 | IBM mapping | n.a. | 7S | 7.02 | 179.9 | 4.8 | 38 | Not pericentromere, not periknob |
| Centromere | Cent7 | MaizeGDB | n.a. | 7 | 7.02 | 209.4 | 7.8 | 0 | |
| AC148081 | umc19383 | IBM mapping | 18.9 | 7L | 7.02 | 244.3 | 14.2 | 31 | |
| Knob 7L | ij1 | MaizeGDB | n.a. | 7L | 7.03 | 330.6 | 19.8 | 57 | |

SI Table 9. Mapping results

Lines in italics correspond to knobs that are present in maize but not in inbred line B73

Abbreviations: n.a.: not analyzed, Chrom.: chromosome, cent.: centromere, cM: centiMorgan, cMC: centiMcClintock