

| LOC_Os09g24200 | | | | | | |
|---|----------|--------|------|--------|------|---------------------|
| Hap. | Promoter | Intron | Ind. | | Jap. | |
| | -617 | 1579 | Num. | GABA | Num. | GABA |
| Hap1 | G | T | 0 | — | 46 | 158.80 ^a |
| Hap2 | A | C | 319 | 135.35 | 175 | 128.36 ^b |
| -log ₁₀ (<i>P</i>) Full | 4.3 | 4.1 | | | | |
| -log ₁₀ (<i>P</i>) <i>Jap.</i> | 4.1 | 3.9 | | | | |

| LOC_Os09g24250 | | | | | | | | | | | | | | | | | | |
|---|----------|------|------|------|------|------|------|------|-----|--------|-------|------|------|------|------|--------|------|---------------------|
| | Promoter | | | | | | | Exon | | Intron | 3'UTR | | | | Ind. | | Jap. | |
| | -1527 | -588 | -570 | -569 | -190 | -189 | -185 | 406 | 432 | 1217 | 4857 | 4861 | 4868 | 4881 | Num. | GABA | Num. | GABA |
| Hap1 | T | G | T | A | T | A | T | A | A | A | A | G | T | G | 0 | — | 36 | 169.01 ^a |
| Hap2 | C | A | C | G | C | C | G | G | G | C | G | A | C | A | 348 | 135.85 | 174 | 128.37 ^b |
| -log ₁₀ (<i>P</i>) Full | 4.5 | 5.3 | 5.1 | 5.1 | 4.2 | 4.1 | 4.1 | 4.3 | 4.5 | 4.6 | 5.9 | 6.3 | 6.5 | 7.2 | | | | |
| -log ₁₀ (<i>P</i>) <i>Jap.</i> | 4.0 | 5.3 | 5.1 | 5.1 | 4.0 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 5.7 | 5.7 | 6.2 | 6.2 | | | | |

| LOC_Os09g24290 | | | | | | | | | | | | | | | | | | | | |
|---|----------|-------|-------|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|--------|------|---------------------|
| Hap. | Promoter | | | | Intron | | Exon | | | | | | | | | | Ind. | | Jap. | |
| | -1490 | -1481 | -1101 | -219 | 3074 | 3092 | 3297 | 3334 | 3364 | 3633 | 3737 | 3741 | 3782 | 3785 | 5576 | 5613 | Num. | GABA | Num. | GABA |
| Hap1 | A | T | C | A | T | C | A | C | C | G | A | A | T | T | G | T | 0 | — | 41 | 161.24 ^a |
| Hap2 | C | C | T | G | C | T | G | T | T | A | G | G | C | C | A | C | 357 | 135.75 | 178 | 128.37 ^b |
| -log ₁₀ (<i>P</i>) Full | 4.4 | 4.6 | 4.4 | 4.4 | 4.2 | 4.1 | 5.1 | 5.4 | 4.7 | 4.5 | 6.0 | 6.1 | 5.0 | 4.9 | 4.8 | 4.3 | | | | |
| -log ₁₀ (<i>P</i>) <i>Jap.</i> | 4.0 | 4.3 | 4.2 | 3.8 | 3.8 | 3.7 | 4.7 | 4.7 | 4.0 | 3.8 | 5.1 | 5.2 | 4.0 | 3.9 | 4.3 | 4.1 | | | | |

| LOC_Os09g24320 | | | | | | | | | | | | |
|---|----------|-------|-------|-------|-------|-------|-------|-------|------|--------|------|---------------------|
| Hap. | Promoter | | | | | | | | Ind. | | Jap. | |
| | -856 | -1137 | -1151 | -1178 | -1181 | -1219 | -1715 | -1760 | Num. | GABA | Num. | GABA |
| Hap1 | T | T | G | T | C | G | T | T | 0 | — | 36 | 169.01 ^a |
| Hap2 | G | C | A | C | T | A | G | G | 348 | 135.85 | 174 | 128.37 ^b |
| -log ₁₀ (<i>P</i>) Full | 5.6 | 5.3 | 6.0 | 4.2 | 4.1 | 6.4 | 4.6 | 4.2 | | | | |
| -log ₁₀ (<i>P</i>) <i>Jap.</i> | 4.8 | 3.7 | 4.0 | 4.1 | 3.8 | 5.8 | 4.1 | 4.1 | | | | |

Supplementary figure S1. Haplotype analysis of the other four candidate genes of *qTFC9-7*.