|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Samples | Comprehensive ranking（ReFinder） | 　 | GeNorm | 　 | NormFinder | 　 | △Ct  | 　 | BestKeeper |
|  |  |  |  |
| Gene | Geometric mean |  | Gene | M-value |  | Gene | Stability value |  | Gene | Mean SD |  | Gene | SD |
|  |  |  |  |
| All samples | *TUB* | 1.32 |  | *TUB* | *0.44* |  | *TUB* | 0.11  |  | *TUB* | 1.49  |  | *H3* | 0.4 |
| *CYP* | 1.68 |  | *CYP* | 0.44 |  | *CYP* | 0.11  |  | *CYP* | 1.54  |  | *CYP* | 0.66 |
| *PEPKR1* | 3.08 |  | *PEPKR1* | 0.51 |  | *PEPKR1* | 0.14  |  | *PEPKR1* | 1.55  |  | *TUB* | 0.69 |
| *H3* | 3.13 |  | *18S* | 0.73 |  | *18S* | 0.18  |  | *H3* | 1.80  |  | *GAPDH* | 0.96 |
| *18S* | 5.05 |  | *H3* | 0.87 |  | *ELF1A* | 0.19  |  | *ELF1A* | 1.92  |  | *PEPKR1* | 0.97 |
| *ELF1A* | 5.44 |  | *ELF1A* | 1.08 |  | *H3* | 0.20  |  | *ACT3* | 2.16  |  | *18S* | 1.02 |
| *GAPDH* | 6.65 |  | *ACT3* | 1.24 |  | *ACT3* | 0.20  |  | *GAPDH* | 2.16  |  | *ELF1A* | 1.36 |
| *ACT3* | 6.90 |  | *GAPDH* | 1.39 |  | G6PD | 0.22  |  | G6PD | 3.13  |  | G6PD | 1.89 |
| *G6PD* | 8.00 |  | G6PD | 1.7 |  | *TUA* | 0.22  |  | *18S* | 3.50  |  | *ACT3* | 2.01 |
| *TUA* | 9.49 |  | *TUA* | 2.15 |  | *GAPDH* | 0.25  |  | *TUA* | 3.95  |  | *TUA* | 3.44 |
| 722A | *H3* | 1.19 |  | *ELF1A* | 0.26  |  | *H3* | 0.05  |  | *H3* | 1.30  |  | *ELF1A* | 0.37  |
| *ELF1A* | 1.73 |  | *H3* | 0.26  |  | *TUB* | 0.06  |  | *TUB* | 1.32  |  | *H3* | 0.47  |
| *TUB* | 2.51 |  | *TUB* | 0.36  |  | *ELF1A* | 0.07  |  | *ELF1A* | 1.33  |  | *CYP* | 0.52  |
| *PEPKR1* | 3.72 |  | *PEPKR1* | 0.39  |  | *PEPKR1* | 0.17  |  | *PEPKR1* | 1.34  |  | *PEPKR1* | 0.59  |
| *CYP* | 4.16 |  | *CYP* | 0.42  |  | *CYP* | 0.22  |  | *CYP* | 1.42  |  | *TUB* | 0.70  |
| *ACT3* | 6.19 |  | *ACT3* | 0.60  |  | *ACT3* | 0.28  |  | *18S* | 1.60  |  | *18S* | 0.93  |
| *18S* | 6.24 |  | *18S* | 0.74  |  | *18S* | 0.28  |  | *ACT3* | 1.74  |  | *ACT3* | 1.22  |
| *GAPDH* | 7.97 |  | *GAPDH* | 0.95  |  | *TUA* | 0.40  |  | *GAPDH* | 1.99  |  | *GAPDH* | 1.33  |
| *G6PD* | 8.97 |  | G6PD | 1.35  |  | *GAPDH* | 0.41  |  | *G6PD* | 3.20  |  | *G6PD* | 2.07  |
| *TUA* | 9.21 |  | *TUA* | 1.97  |  | G6PD | 0.46  |  | *TUA* | 4.46  |  | *TUA* | 3.73  |
| 722B | *TUB* | 1.50 |  | *TUB* | 0.13  |  | *TUB* | 0.12  |  | *TUB* | 1.42  |  | *H3* | 0.20  |
| *CYP* | 2.00 |  | *CYP* | 0.13  |  | *CYP* | 0.13  |  | *CYP* | 1.44  |  | *GAPDH* | 0.55  |
| *18S* | 2.71 |  | *18S* | 0.25  |  | *18S* | 0.21  |  | *18S* | 1.50  |  | *18S* | 0.64  |
| *H3* | 3.72 |  | *PEPKR1* | 0.48  |  | *GAPDH* | 0.25  |  | *PEPKR1* | 1.60  |  | *CYP* | 0.67  |
| *GAPDH* | 3.76 |  | *H3* | 0.76  |  | *PEPKR1* | 0.26  |  | *GAPDH* | 1.83  |  | *TUB* | 0.69  |
| *PEPKR1* | 4.36 |  | *GAPDH* | 0.88  |  | *ELF1A* | 0.27  |  | *H3* | 1.91  |  | *PEPKR1* | 1.24  |
| *ELF1A* | 6.70 |  | *ELF1A* | 1.24  |  | *ACT3* | 0.29  |  | *ELF1A* | 2.11  |  | *G6PD* | 1.73  |
| *ACT3* | 7.71 |  | *ACT3* | 1.42  |  | *H3* | 0.32  |  | *ACT3* | 2.18  |  | *ELF1A* | 2.28  |
| *G6PD* | 8.43 |  | *G6PD* | 1.72  |  | *TUA* | 0.39  |  | *G6PD* | 3.09  |  | *ACT3* | 2.33  |
| *TUA* | 9.49 | 　 | *TUA* | 2.04  | 　 | *G6PD* | 0.54  | 　 | *TUA* | 3.33  | 　 | *TUA* | 3.16  |

**Table S2**. Gene expression stability ranked by comprehensive ranking, GeNorm, NormFinder, △Ct and BestKeeper in kenaf.