

附表 1 内标准基因 *zSSIb* 标准曲线数值Table S1 Values of internal standard gene *zSSIb* standard curve

| 校准品拷贝数<br>Calibrator copy number | Ct 值 Ct value     |          |       |                   |          |       |                   |          |       |
|----------------------------------|-------------------|----------|-------|-------------------|----------|-------|-------------------|----------|-------|
| G1(40000 copies)                 | 23.06             | 22.93    | 22.64 | 22.51             | 22.65    | 22.77 | 22.92             | 22.82    | 22.83 |
| G2(5714 copies)                  | 25.37             | 25.29    | 25.29 | 25.03             | 25.08    | 24.99 | 25.28             | 25.25    | 25.30 |
| G3 (816 copies)                  | 28.31             | 28.12    | 28.11 | 27.81             | 28.03    | 27.76 | 28.26             | 28.32    | 28.20 |
| G4 (117 copies)                  | 31.00             | 30.85    | 31.17 | 30.94             | 30.98    | 30.95 | 31.02             | 31.05    | 30.98 |
| G5 (17 copies)                   | 33.92             | 33.84    | 33.99 | 33.79             | 33.38    | 33.93 | 33.53             | 33.55    | 33.41 |
| 公式<br>Formula                    | y= -3.277x+37.792 |          |       | y= -3.318x+37.703 |          |       | y= -3.217x+37.563 |          |       |
| 标准曲线<br>Standard curve           | $R^2$             | 0.998    |       |                   | 0.997    |       |                   | 0.998    |       |
| 扩增效率<br>Amplification efficiency |                   | 101.927% |       |                   | 100.156% |       |                   | 104.550% |       |

附表 2 WYN041 转化体标准曲线数值

Table S2 Values of standard curve of WYN041 transformant

| 校准品拷贝数<br>Calibrator copy number | Ct 值 Ct value     |         |       |                   |         |       |                   |         |       |
|----------------------------------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|
| G1(40000 copies)                 | 22.67             | 22.68   | 22.54 | 22.72             | 22.62   | 22.88 | 22.70             | 22.72   | 22.62 |
| G2(5714 copies)                  | 25.24             | 25.24   | 25.28 | 25.34             | 25.45   | 25.34 | 25.24             | 25.24   | 25.22 |
| G3 (816 copies)                  | 28.11             | 28.19   | 28.12 | 28.17             | 28.32   | 28.31 | 28.14             | 28.07   | 28.03 |
| G4 (117 copies)                  | 31.29             | 31.10   | 31.03 | 31.22             | 31.16   | 31.25 | 30.85             | 31.07   | 30.72 |
| G5 (17 copies)                   | 34.44             | 34.13   | 34.13 | 33.77             | 34.54   | 34.53 | 34.22             | 34.62   | 33.65 |
| 公式<br>Formula                    | y= -3.443x+38.304 |         |       | y= -3.421x+38.336 |         |       | y= -3.386x+38.066 |         |       |
| 标准曲线<br>Standard curve           | $R^2$             | 0.998   |       |                   | 0.997   |       |                   | 0.996   |       |
| 扩增效率<br>Amplification efficiency |                   | 95.184% |       |                   | 96.045% |       |                   | 97.398% |       |