|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hydroperoxide Contentration(mM) | BL21(pET32a) | | | BL21(pET32a-Mn-SOD) | | |
| 25 | 2.332 | 2.661 | 2.672 | 1.855 | 2.202 | 2.206 |
| 50 | 2.932 | 2.928 | 3.086 | 2.149 | 2.632 | 2.64 |
| 75 | 3.087 | 3.123 | 3.249 | 2.398 | 2.800 | 2.769 |
| 100 | 3.402 | 3.413 | 3.468 | 2.71 | 3.006 | 3.026 |

**Supplementary data. S5. Diameter of inhibition zone around the Oxford Cup (cm).** Inhibited zones of the bacteria on agar plates. Different H2O2 concentrations from 25 mM to 100 mM. mMn-SOD: *E. coli* cells BL21(pET32a-mMn-SOD); Control: *E. coli* cells BL21(pET32a). Observe the zone of inhibition formed around the cup, and record the diameter of the zone. Values are compared to the control bacteria between the same group. The data are the mean ± *S.E.* of three replicates.