

Table 1 Mean length \bar{L} and radius R of *E. coli* B/r at various doubling times τ

| Medium containing | τ (min) | \bar{L} (μm) | R (μm) |
|----------------------------------|--------------|-----------------------------|-----------------------|
| Alanine | 160 | 2.39 | 0.217 |
| | 160 | 2.20 | 0.212 |
| | 160 | 2.19 | 0.212 |
| | 124 | 2.72 | 0.238 |
| Succinate | 105 | 2.27 | 0.250 |
| Alanine + proline | 72 | 2.64 | 0.229 |
| | 72 | 2.80 | 0.288 |
| Glycerol | 60 | 2.53 | 0.232 |
| Glucose | 45 | 2.62 | 0.308 |
| | 45 | 2.66 | 0.300 |
| | 45 | 2.68 | 0.312 |
| Glucose + casamino acids (Difco) | 32 | 3.14 | 0.321 |
| | 31 | 3.35 | 0.446 |
| | 31 | 3.08 | 0.406 |
| | 31 | 3.07 | 0.417 |
| | 31 | 3.22 | 0.429 |
| Glucose + casein | 24 | 3.58 | 0.479 |
| Hydrolysate (Sigma) | 24 | 3.29 | 0.466 |

E. coli B/r strain H266 was grown in minimal salts medium supplemented with the carbon source indicated¹⁰. Cells, fixed in OsO₄ and agar-filtered, were measured from projections of electron micrographs at a final magnification of 12,000.