

Costs relative to the cell budget (%)

1

10

100

Total cell budget

Essential genes

Maintenance during cycle

Spore life cycle

Membrane lipids

Flagella

Homeostasis

Heat shock proteins

Competence

Biofilm

Chemotaxis

Swarming

Genome replication

$10^9$

$10^{10}$

$10^{11}$

ATP molecules

