

Symbol	Parameter	Value	Ref.
D	Oxygen diffusion coefficient	$1.53 \times 10^{-9} \text{ m}^2 \cdot \text{s}^{-1}$	[1]
L_0	Initial biofilm thickness	$139 \mu\text{m}$	[2]
g	Fraction of total protein synthesis	0 or 1	*
h_0	Characteristic length scale	$100 \mu\text{m}$	*
k	Oxygen reaction rate (zero order)	$15 \text{ mg} \cdot \text{l}^{-1} \cdot \text{s}^{-1}$	[1]
n_{GFP}	Turnover rate of GFP	$0 \sim 0.5 \text{ h}^{-1}$	*
s^0	Bulk concentration of oxygen	$6 \text{ mg} \cdot \text{l}^{-1}$	[2]
t_0	Characteristic time scale	3600 s	*
μ_{max}	Maximum specific growth rate of biofilm	0.1 h^{-1}	†
ρ_P	Protein density	$6 \text{ g} \cdot \text{l}^{-1}$	[1]

Table S2: Parameter values for Inducible GFP simulation. *: assumed, †: unpublished estimate, other references are listed in **Text S1**.