

<i>Parameter</i>	<i>Description</i>	<i>Value</i>	<i>Source</i>
$C_{AMO}$	Maximal transcription rate	$0.08 \text{ min}^{-1}$	[11]
$d_{mRNA\_amo}$	mRNA <sub>amo</sub> degradation rate	$0.005 \text{ min}^{-1}$	[10]
$v_{amo}$	Maximal translation rate	$0.96 \text{ min}^{-1}$	[10]
$k_1$	Complex <i>AMO:chlor</i> formation reaction rate	$2 (\mu\text{M} \cdot \text{min})^{-1}$	Assumed
$k_{-1}$	Complex <i>AMO:chlor</i> reverse rate constant	$1 \text{ min}^{-1}$	Assumed
$k_2$	Complex <i>factor:COCl<sub>2</sub></i> formation reaction rate	$2 (\mu\text{M} \cdot \text{min})^{-1}$	Assumed
$k_{-2}$	Complex <i>factor:COCl<sub>2</sub></i> reverse rate constant	$1 \text{ min}^{-1}$	Assumed
$k_{COCl_2}$	<i>COCl<sub>2</sub></i> formation rate constant	$1 \text{ min}^{-1}$	Assumed
$d_{AMO:chlor}$	<i>AMO:chlor</i> degradation rate	$0.002 \text{ min}^{-1}$	[10]
$d_{AMO}$	AMO degradation rate	$0.02 \text{ min}^{-1}$	[10]
$P$	Permeability coefficient	$0.24 \text{ cm/h}$	[15]
$A_{int}$	Interface surface	$0.206 \text{ m}^2$	[3]
$V_{cell}$	Total volume of cells	$0.04 \text{ ml}$	Estimated
$C_{factor}$	Maximal transcription rate	$0.08 \text{ min}^{-1}$	[11]
$d_{mRNA\_factor}$	mRNA <sub>factor</sub> degradation rate	$0.005 \text{ min}^{-1}$	[10]
$v_{factor}$	Maximal translation rate	$0.96 \text{ min}^{-1}$	[10]
$k_3$	Complex: <i>poly</i> formation reaction rate	$2 (\mu\text{M} \cdot \text{min})^{-1}$	Assumed
$k_{-3}$	Complex: <i>poly</i> reverse rate constant	$1 \text{ min}^{-1}$	Assumed
$k_4$	Complex: <i>promoter</i> formation reaction rate	$2 (\mu\text{M} \cdot \text{min})^{-1}$	Assumed
$k_{-4}$	Complex: <i>promoter</i> reverse rate	$1 \text{ min}^{-1}$	Assumed
$k_1$	<i>Non-active factor</i> formation rate	$1 \cdot 10^{10} (\text{M} \cdot \text{min})^{-1}$	Assumed
$k_{-1}$	<i>Non-active factor</i> reverse rate	$1 \text{ min}^{-1}$	Assumed
$d_{fH}$	<i>Non-active factor</i> degradation rate	$0.005 \text{ min}^{-1}$	[10]
$d_{factor:COCl_2}$	<i>factor:COCl<sub>2</sub></i> degradation rate	$0.002 \text{ min}^{-1}$	[10]
$d_{complex:poly}$	<i>complex:poly</i> degradation rate	$0.002 \text{ min}^{-1}$	[10]
$d_{complex:promotor}$	<i>complex:promotor</i> degradation rate	$0.002 \text{ min}^{-1}$	[10]
$C_{GFP}$	maximal transcription rate	$0.08 \text{ min}^{-1}$	[12]
$d_{mGFP}$	mRNA <sub>GFP</sub> degradation rate	$1.65 \cdot 10^{-3} \text{ min}^{-1}$	[13]
$v_{GFPim}$	Maximal translation rate	$0.24 \text{ min}^{-1}$	[10]
$k_5$	Equilibrium GFP <sub>mis</sub> -GFP constant forward rate	$5 \text{ min}^{-1}$	Assumed
$k_{-5}$	Equilibrium GFP <sub>mis</sub> -GFP constant reverse rate	$1 \text{ min}^{-1}$	Assumed
$k_{mis}$	GFP <sub>mis</sub> formation rate	$1 \text{ min}^{-1}$	Assumed

<i>Parameter</i>	<i>Description</i>	<i>Value</i>	<i>Source</i>
$k_{\text{fold}}$	GFP formation rate	$2 \text{ min}^{-1}$	Assumed
$d_{\text{GFP}_{\text{im}}}$	$\text{GFP}_{\text{im}}$ degradation rate	$2.14 \cdot 10^{-4} \text{ min}^{-1}$	[10]
$d_{\text{mis}}$	$\text{GFP}_{\text{mis}}$ degradation rate	$2.14 \cdot 10^{-4} \text{ min}^{-1}$	[10]
$d_{\text{GFP}}$	GFP degradation rate	$2.14 \cdot 10^{-4} \text{ min}^{-1}$	[10]
$k_{\text{Dg}}$	Mass transfer coefficient from bulk to gas.	$2.48 \cdot 10^{-3} \text{ L/s}$	Estimated
$m_{\text{g}}$	Equilibrium constant bulk-gas	0.4533	Estimated
$V_{\text{g}}$	Gas volume	$M_{\text{bulk}}/M_{\text{gas phase}}$ 10 ml	Experimental
$V_{\text{b}}$	Bulk volume	40 ml	Experimental
DNAamo	Concentration of DNA coding AMO in the cell	$0.06 \mu\text{M}$	[3]
DNAfactor	Concentration of DNA coding sigma70 factor	$0.06 \mu\text{M}$	[3]
Promoter	Concentration of mbla in the cell	$0.06 \mu\text{M}$	[3]
poly	Concentration of RNA polymerasa in the cell	$0.239 \mu\text{M}$	[3]
a	Inhibition parameter	5.37	Estimated
b	Inhibition parameter	0.41	Estimated
c	Inhibition parameter	4.14	Estimated
$m_{\text{in}}$	Equilibrium constant cell-bulk	1 $M_{\text{bulk}}/M_{\text{cell}}$	