

Parameter	Description	Value
$[O_T]$	Total operator (bound & unbound) concentration	$1 \times 10^{-3} \mu\text{M}$
$K_2[R_T]$	Total repressor (bound & unbound) concentration $\times$ equilibrium constant	$1 \times 10^5$ dimensionless
$K_1$	Equilibrium constant	$0.012 \mu\text{M}^{-2}$
$\delta$	Facilitated transport coefficient	$0.82 \text{ min}^{-1}$
$\beta$	Permease saturation constant	$500 \mu\text{M}$
$k_2$	Rate of dilution of $[Y]$ and $[I]$	$0.0055 \text{ min}^{-1}$
$\alpha$	Permease turnover number	$60000 \text{ min}^{-1}$
$k_1$	Kinetic rate constant (permease generation)	$9 \text{ min}^{-1}$