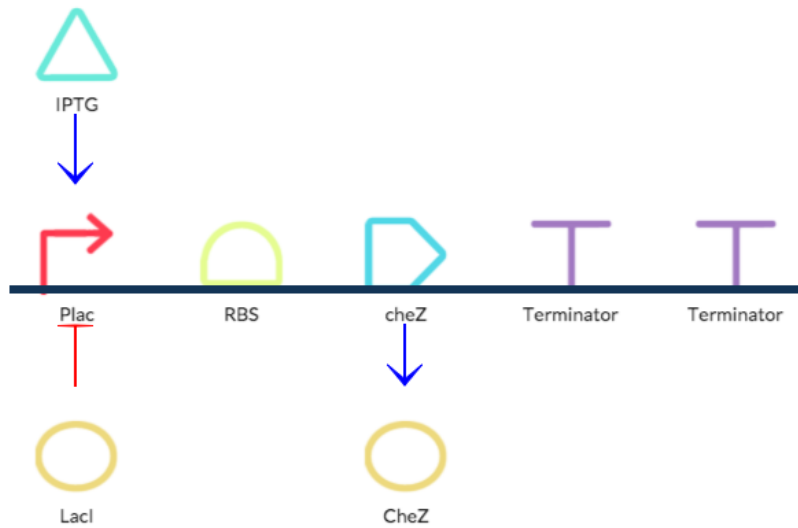


Mobility



Formulae for two certain parts

$$[\text{cheZ}^F] = [\text{cheZ}] \frac{1}{1 + \left(\frac{[\text{LacI}]}{\beta_{\text{LacI}}} \right)^{\mu_{\text{LacI}}}} \frac{[\text{IPTG}]}{\beta_{\text{IPTG}} + [\text{IPTG}]}$$

$$\frac{d[\text{CheZ}]}{dt} = \chi_{\text{Plac}} \alpha_{\text{CheZ}} [\text{cheZ}^F] - d[\text{CheZ}]$$

Parameter Table

Symbols	Parameters	Values and Units
Beta_IPTG	IPTG Repression coefficient	4
Beta_LacI	LacI Repression coefficient	3
Beta_Arac	Arac Repression coefficient	4
Beta_L_Arabinose	L_Arabinose Repression coefficient	3
Mju_LacI	LacI Cooperativity coefficient	2
Mju_Arac	Arac Cooperativity coefficient	2
Alpha_CheZ	Translation rate of CheZ	3.467umol*min ⁻¹
Alpha_LacI	Translation rate of LacI	2.734umol*min ⁻¹

Reference: <http://2014.igem.org/Team:XMU-China>