Leakage term

$$-k_L s_L B_E \frac{1 - \frac{C}{C_{L\alpha}}}{C + s_L} \tag{1}$$

$$\frac{dC}{dt} = sr_C - k_C \frac{C}{C + k_M} \frac{[MMP]}{[MMP] + s_C} \tag{2}$$

$$\frac{d[MMP]}{dt} = \alpha_{MMP} M_I \frac{F_\alpha}{F_\alpha + s_{MMP}} - \mu_{MMP}[MMP] + sr_{MMP} \tag{3}$$

$$\frac{dC}{dt} = 0 \implies k_C = sr_C \frac{C + k_M}{C} \frac{[MMP] + s_C}{[MMP]} \tag{4}$$