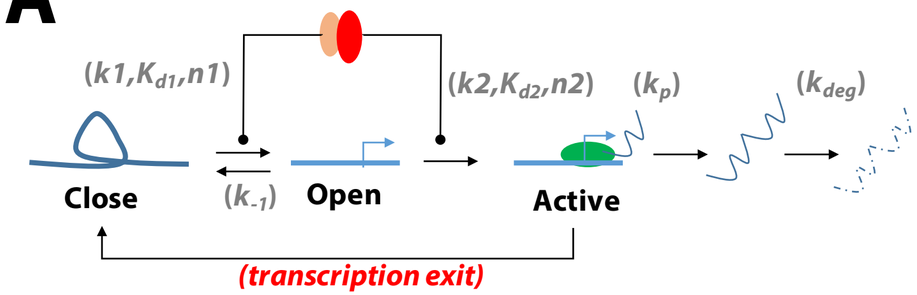
A



$$\frac{dC}{dt} = -k_1 \frac{[NF\kappa B]^{n_1}}{[NF\kappa B]^{n_1} + K_{d1}^{n_1}} \cdot C + k_{-1} \cdot O + k_{-3} \frac{A^{n_3}}{A^n + K_{d3}^{n_3}}$$

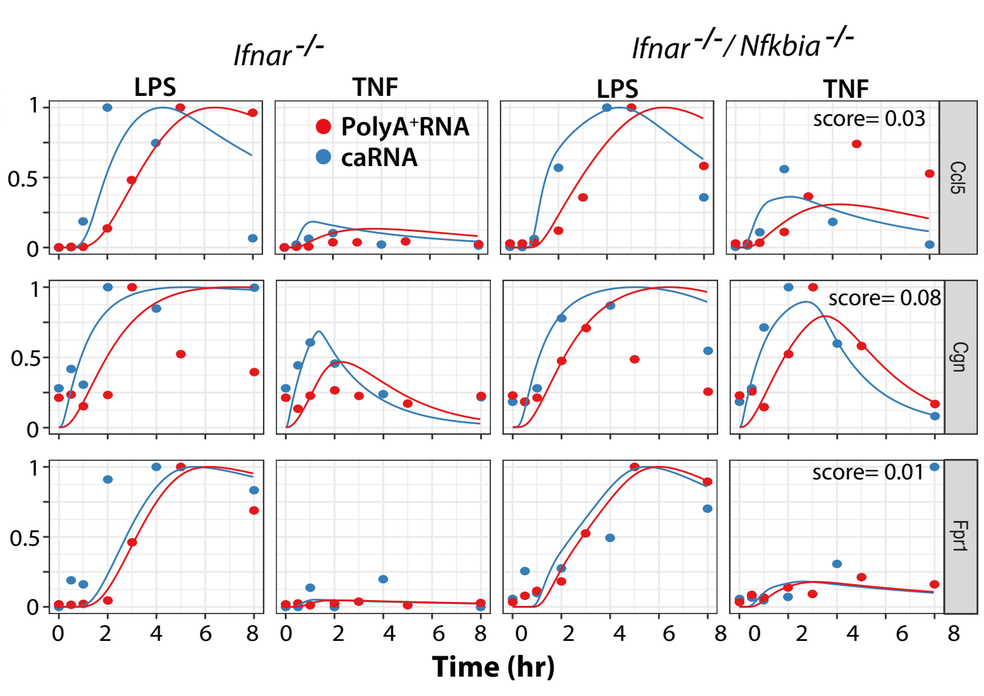
$$\frac{dO}{dt} = k_1 \frac{[NF\kappa B]^{n_1}}{[NF\kappa B]^{n} + K_{d1}^{n_1}} \cdot C - k_2 \frac{[NF\kappa B]^{n_2}}{[NF\kappa B]^{n_2} + K_{d2}^{n_2}} \cdot O - k_{-1} \cdot O$$

$$\frac{dA}{dt} = k_2 \frac{[NF\kappa B]^{n_2}}{[NF\kappa B]^{n_2} + K_{d2}^{n_2}} \cdot O - k_{-3} \frac{A^{n_3}}{A^{n_3} + K_{d3}^{n_3}}$$

$$\frac{[mRNA]}{dt} = k_p \cdot A - k_{deg} \cdot [mRNA]$$

$$C + O + A = 1$$

B



C