Text S1. The ODE Model

$$\frac{\mathrm{d}\left([\mathrm{CRP}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{ka01}_1 \cdot [\mathrm{PC}] \cdot [\mathrm{CRP}] - \mathrm{ka01}_2 \cdot [\mathrm{PC/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{ke01}_1 \cdot [\mathrm{GlcNac/LF}] \cdot [\mathrm{CRP}] - \mathrm{ke01}_2 \cdot [\mathrm{GlcNac/LF/CRP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{PC}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{ka01}_1 \cdot [\mathrm{PC}] \cdot [\mathrm{CRP}] - \mathrm{ka01}_2 \cdot [\mathrm{PC/CRP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{PC/CRP}]\right)}{\mathrm{d}t} = +\left(\left(\mathrm{ka01}_1 \cdot [\mathrm{PC}] \cdot [\mathrm{CRP}] - \mathrm{ka01}_2 \cdot [\mathrm{PC/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{ka02}_1 \cdot [\mathrm{PC/CRP}] \cdot [\mathrm{C1}] - \mathrm{ka02}_2 \cdot [\mathrm{PC/CRP/C1}]\right)\right)$$
$$-\left(\left(\mathrm{kf01}_1 \cdot [\mathrm{C4BP}] \cdot [\mathrm{PC/CRP}] - \mathrm{kf01}_2 \cdot [\mathrm{C4BP/PC/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{kd01}_1 \cdot [\mathrm{PC/CRP}] \cdot [\mathrm{LF}] - \mathrm{kd01}_2 \cdot [\mathrm{PC/CRP/LF}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C4}]\right)}{\mathrm{d}t} = -\left(\frac{\mathrm{kd03}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kd03}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{kb03}_1 \cdot [\mathrm{GlcNac/LF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kb03}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{ke03}_1 \cdot [\mathrm{GlcNac/LF/CRP/C1}] \cdot [\mathrm{C4}]}{\mathrm{ke03}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{ka03}_1 \cdot [\mathrm{PC/CRP/C1}] \cdot [\mathrm{C4}]}{\mathrm{ka03}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{kd06}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{C4}]}{\mathrm{kd06}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{ke06}_1 \cdot [\mathrm{GlcNac/LF/CRP/MASP}] \cdot [\mathrm{C4}]}{\mathrm{ke06}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{kd10}_1 \cdot [\mathrm{PC/CRP/LF/C1/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kd10}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\frac{\mathrm{kg03}_1 \cdot [\mathrm{GlcNac/HF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kg03}_2 + [\mathrm{C4}]}\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C4a}]\right)}{\mathrm{d}t} = +\left(\frac{\mathrm{kd03}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kd03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{kb03}_1 \cdot [\mathrm{GlcNac/LF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kb03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{ke03}_1 \cdot [\mathrm{GlcNac/LF/CRP/C1}] \cdot [\mathrm{C4}]}{\mathrm{ke03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{ka03}_1 \cdot [\mathrm{PC/CRP/C1}] \cdot [\mathrm{C4}]}{\mathrm{ka03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{kd06}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{C4}]}{\mathrm{kd06}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{ke06}_1 \cdot [\mathrm{GlcNac/LF/CRP/MASP}] \cdot [\mathrm{C4}]}{\mathrm{ke06}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{kd10}_1 \cdot [\mathrm{PC/CRP/LF/C1/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kd10}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{kg03}_1 \cdot [\mathrm{GlcNac/HF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kg03}_2 + [\mathrm{C4}]}\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C4b}]\right)}{\mathrm{d}t} = +\left(\frac{\mathrm{kd03}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kd03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{kb03}_1 \cdot [\mathrm{GlcNac/LF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kb03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{ke03}_1 \cdot [\mathrm{GlcNac/LF/CRP/C1}] \cdot [\mathrm{C4}]}{\mathrm{ke03}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{ka03}_1 \cdot [\mathrm{PC/CRP/C1}] \cdot [\mathrm{C4}]}{\mathrm{ka03}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\left(\mathrm{kf04}_1 \cdot [\mathrm{C4BP}] \cdot [\mathrm{C4b}] - \mathrm{kf04}_2 \cdot [\mathrm{C4BP/C4b}]\right)\right)$$
$$+\left(\mathrm{kf05} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C4BP}]\right)$$
$$+\left(\frac{\mathrm{kd06}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{C4}]}{\mathrm{kd06}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{ke06}_1 \cdot [\mathrm{GlcNac/LF/CRP/MASP}] \cdot [\mathrm{C4}]}{\mathrm{ke06}_2 + [\mathrm{C4}]}\right)$$
$$+\left(\frac{\mathrm{kd10}_1 \cdot [\mathrm{PC/CRP/LF/C1/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kd10}_2 + [\mathrm{C4}]}\right)$$
$$-\left(\left(\mathrm{kc01}_1 \cdot [\mathrm{C4b}] \cdot [\mathrm{C2a}] - \mathrm{kc01}_2 \cdot [\mathrm{C4b/C2a}]\right)\right)$$
$$+\left(\frac{\mathrm{kg03}_1 \cdot [\mathrm{GlcNac/HF/MASP}] \cdot [\mathrm{C4}]}{\mathrm{kg03}_2 + [\mathrm{C4}]}\right)$$

$$\frac{\mathrm{d}\,([\mathrm{C2}]\,)}{\mathrm{d}t} = -\left(\frac{\mathrm{kd04}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kd04}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{kb04}_1 \cdot [\mathrm{GlcNac/LF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kb04}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{ke04}_1 \cdot [\mathrm{GlcNac/LF/CRP/C1}] \cdot [\mathrm{C2}]}{\mathrm{ke04}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{ka04}_1 \cdot [\mathrm{PC/CRP/C1}] \cdot [\mathrm{C2}]}{\mathrm{ka04}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{kd07}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{C2}]}{\mathrm{kd07}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{ke07}_1 \cdot [\mathrm{GlcNac/LF/CRP/MASP}] \cdot [\mathrm{C2}]}{\mathrm{ke07}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{kd11}_1 \cdot [\mathrm{PC/CRP/LF/C1/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kd11}_2 + [\mathrm{C2}]}\right)$$

$$-\left(\frac{\mathrm{kg04}_1 \cdot [\mathrm{GlcNac/HF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kg04}_2 + [\mathrm{C2}]}\right)$$

$$\frac{\mathrm{d}\,([\mathrm{C1}]\,)}{\mathrm{d}t} = -\left((\mathrm{ka02}_1 \cdot [\mathrm{PC/CRP}] \cdot [\mathrm{C1}] - \mathrm{ka02}_2 \cdot [\mathrm{PC/CRP/C1}])\right)$$

$$-\left((\mathrm{ke02}_1 \cdot [\mathrm{GlcNac/LF/CRP}] \cdot [\mathrm{C1}] - \mathrm{ke02}_2 \cdot [\mathrm{GlcNac/LF/CRP/C1}])\right)$$

$$-\left((\mathrm{kd05}_1 \cdot [\mathrm{PC/CRP/LF}] \cdot [\mathrm{C1}] - \mathrm{kd05}_2 \cdot [\mathrm{PC/CRP/LF/C1}])\right)$$

$$-\left((\mathrm{kd09}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C1}] - \mathrm{kd09}_2 \cdot [\mathrm{PC/CRP/LF/C1/MASP}])\right)$$

$$\frac{\mathrm{d}\,([\mathrm{PC/CRP/C1}]\,)}{\mathrm{d}t} = +\left((\mathrm{ka02}_1 \cdot [\mathrm{PC/CRP}] \cdot [\mathrm{C1}] - \mathrm{ka02}_2 \cdot [\mathrm{PC/CRP/C1}])\right)$$

$$\frac{\mathrm{d}\,([\mathrm{C2a}]\,)}{\mathrm{d}t} = +\left(\frac{\mathrm{kd04}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kd04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kb04}_1 \cdot [\mathrm{GlcNac/LF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kb04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{ke04}_1 \cdot [\mathrm{GlcNac/LF/CRP/C1}] \cdot [\mathrm{C2}]}{\mathrm{ke04}_2 + [\mathrm{C2}]}\right)$$

$$+(\mathrm{kf05} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C4BP}])$$

$$+\left(\frac{\mathrm{ka04}_1 \cdot [\mathrm{PC/CRP/C1}] \cdot [\mathrm{C2}]}{\mathrm{ka04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kd07}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{C2}]}{\mathrm{kd07}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{ke07}_1 \cdot [\mathrm{GlcNac/LF/CRP/MASP}] \cdot [\mathrm{C2}]}{\mathrm{ke07}_2 + [\mathrm{C2}]}\right)$$

$$-\left((\mathrm{kc01}_1 \cdot [\mathrm{C4b}] \cdot [\mathrm{C2a}] - \mathrm{kc01}_2 \cdot [\mathrm{C4b/C2a}])\right)$$

$$+\left(\frac{\mathrm{kd11}_1 \cdot [\mathrm{PC/CRP/LF/C1/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kd11}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kg04}_1 \cdot [\mathrm{GlcNac/HF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kg04}_2 + [\mathrm{C2}]}\right)$$

$$\frac{\mathrm{d}\,([\mathrm{C2b}]\,)}{\mathrm{d}t} = +\left(\frac{\mathrm{kd04}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kd04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kb04}_1 \cdot [\mathrm{GlcNac/LF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kb04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{ke04}_1 \cdot [\mathrm{GlcNac/LF/CRP/C1}] \cdot [\mathrm{C2}]}{\mathrm{ke04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{ka04}_1 \cdot [\mathrm{PC/CRP/C1}] \cdot [\mathrm{C2}]}{\mathrm{ka04}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kd07}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{C2}]}{\mathrm{kd07}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{ke07}_1 \cdot [\mathrm{GlcNac/LF/CRP/MASP}] \cdot [\mathrm{C2}]}{\mathrm{ke07}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kd11}_1 \cdot [\mathrm{PC/CRP/LF/C1/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kd11}_2 + [\mathrm{C2}]}\right)$$

$$+\left(\frac{\mathrm{kg04}_1 \cdot [\mathrm{GlcNac/HF/MASP}] \cdot [\mathrm{C2}]}{\mathrm{kg04}_2 + [\mathrm{C2}]}\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C4b/C2a}]\right)}{\mathrm{d}t} = -\left(\mathrm{kf03} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C4BP}]\right)$$
$$-\left(\mathrm{kf05} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C4BP}]\right)$$
$$-\left(\left(\mathrm{kf06}_1 \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C4BP}] - \mathrm{kf06}_2 \cdot [\mathrm{C4b/C2a/C4BP}]\right)\right)$$
$$-\left(\mathrm{k1}_{(\mathrm{tmp3})} \cdot [\mathrm{C4b/C2a}]\right)$$
$$+\left(\left(\mathrm{kc01}_1 \cdot [\mathrm{C4b}] \cdot [\mathrm{C2a}] - \mathrm{kc01}_2 \cdot [\mathrm{C4b/C2a}]\right)\right)$$
$$-\left(\left(\mathrm{kc04}_1 \cdot [\mathrm{C4b/C2a}] - \mathrm{kc04}_2 \cdot [\mathrm{dC4b/C2a}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C3}]\right)}{\mathrm{d}t} = -\left(\mathrm{kc02} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C3}]\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C3a}]\right)}{\mathrm{d}t} = +\left(\mathrm{kc02} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C3}]\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C3b}]\right)}{\mathrm{d}t} = -\left(\mathrm{k1}_{(\mathrm{tmp2})} \cdot [\mathrm{C3b}]\right)$$
$$+\left(\mathrm{kc02} \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C3}]\right)$$
$$-\left(\left(\mathrm{kc03}_1 \cdot [\mathrm{C3b}] - \mathrm{kc03}_2 \cdot [\mathrm{dC3b}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{dC3b}]\right)}{\mathrm{d}t} = +\left(\left(\mathrm{kc03}_1 \cdot [\mathrm{C3b}] - \mathrm{kc03}_2 \cdot [\mathrm{dC3b}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{MASP}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kb02}_1 \cdot [\mathrm{GlcNac/LF}] \cdot [\mathrm{MASP}] - \mathrm{kb02}_2 \cdot [\mathrm{GlcNac/LF/MASP}]\right)\right)$$
$$-\left(\left(\mathrm{ke05}_1 \cdot [\mathrm{GlcNac/LF/CRP}] \cdot [\mathrm{MASP}] - \mathrm{ke05}_2 \cdot [\mathrm{GlcNac/LF/CRP/MASP}]\right)\right)$$
$$-\left(\left(\mathrm{kd08}_1 \cdot [\mathrm{PC/CRP/LF/C1}] \cdot [\mathrm{MASP}] - \mathrm{kd08}_2 \cdot [\mathrm{PC/CRP/LF/C1/MASP}]\right)\right)$$
$$-\left(\left(\mathrm{kg02}_1 \cdot [\mathrm{GlcNac/HF}] \cdot [\mathrm{MASP}] - \mathrm{kg02}_2 \cdot [\mathrm{GlcNac/HF/MASP}]\right)\right)$$
$$-\left(\left(\mathrm{kd02}_1 \cdot [\mathrm{PC/CRP/LF}] \cdot [\mathrm{MASP}] - \mathrm{kd02}_2 \cdot [\mathrm{PC/CRP/LF/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{dC4b/C2a}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kf07}_1 \cdot [\mathrm{dC4b/C2a}] \cdot [\mathrm{C4BP}] - \mathrm{kf07}_2 \cdot [\mathrm{dC4b/C2a/C4BP}]\right)\right)$$
$$+\left(\left(\mathrm{kc04}_1 \cdot [\mathrm{C4b/C2a}] - \mathrm{kc04}_2 \cdot [\mathrm{dC4b/C2a}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{GlcNac}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kb01}_1 \cdot [\mathrm{GlcNac}] \cdot [\mathrm{LF}] - \mathrm{kb01}_2 \cdot [\mathrm{GlcNac/LF}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{GlcNac/LF}]\right)}{\mathrm{d}t} = +\left(\left(\mathrm{kb01}_1 \cdot [\mathrm{GlcNac}] \cdot [\mathrm{LF}] - \mathrm{kb01}_2 \cdot [\mathrm{GlcNac/LF}]\right)\right)$$
$$-\left(\left(\mathrm{kb02}_1 \cdot [\mathrm{GlcNac/LF}] \cdot [\mathrm{MASP}] - \mathrm{kb02}_2 \cdot [\mathrm{GlcNac/LF/MASP}]\right)\right)$$
$$-\left(\left(\mathrm{ke01}_1 \cdot [\mathrm{GlcNac/LF}] \cdot [\mathrm{CRP}] - \mathrm{ke01}_2 \cdot [\mathrm{GlcNac/LF/CRP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{LF}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kb01}_1 \cdot [\mathrm{GlcNac}] \cdot [\mathrm{LF}] - \mathrm{kb01}_2 \cdot [\mathrm{GlcNac/LF}]\right)\right)$$
$$-\left(\left(\mathrm{kd01}_1 \cdot [\mathrm{PC/CRP}] \cdot [\mathrm{LF}] - \mathrm{kd01}_2 \cdot [\mathrm{PC/CRP/LF}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{GlcNac/LF/MASP}]\right)}{\mathrm{d}t} = +\left(\left(\mathrm{kb02}_1 \cdot [\mathrm{GlcNac/LF}] \cdot [\mathrm{MASP}] - \mathrm{kb02}_2 \cdot [\mathrm{GlcNac/LF/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{PC/CRP/LF}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kd05}_1 \cdot [\mathrm{PC/CRP/LF}] \cdot [\mathrm{C1}] - \mathrm{kd05}_2 \cdot [\mathrm{PC/CRP/LF/C1}]\right)\right)$$
$$-\left(\left(\mathrm{k1}_{(\mathrm{tmp}_f1)} \cdot [\mathrm{C4BP}] \cdot [\mathrm{PC/CRP/LF}] - \mathrm{k2}_{(\mathrm{tmp}_f1)} \cdot [\mathrm{C4BP/PC/CRP/LF}]\right)\right)$$
$$+\left(\left(\mathrm{kd01}_1 \cdot [\mathrm{PC/CRP}] \cdot [\mathrm{LF}] - \mathrm{kd01}_2 \cdot [\mathrm{PC/CRP/LF}]\right)\right)$$
$$-\left(\left(\mathrm{kd02}_1 \cdot [\mathrm{PC/CRP/LF}] \cdot [\mathrm{MASP}] - \mathrm{kd02}_2 \cdot [\mathrm{PC/CRP/LF/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{PC/CRP/LF/MASP}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kd09}_1 \cdot [\mathrm{PC/CRP/LF/MASP}] \cdot [\mathrm{C1}] - \mathrm{kd09}_2 \cdot [\mathrm{PC/CRP/LF/C1/MASP}]\right)\right)$$
$$+\left(\left(\mathrm{kd02}_1 \cdot [\mathrm{PC/CRP/LF}] \cdot [\mathrm{MASP}] - \mathrm{kd02}_2 \cdot [\mathrm{PC/CRP/LF/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{GlcNac/LF/CRP}]\right)}{\mathrm{d}t} = +\left(\left(\mathrm{ke01}_1 \cdot [\mathrm{GlcNac/LF}] \cdot [\mathrm{CRP}] - \mathrm{ke01}_2 \cdot [\mathrm{GlcNac/LF/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{ke02}_1 \cdot [\mathrm{GlcNac/LF/CRP}] \cdot [\mathrm{C1}] - \mathrm{ke02}_2 \cdot [\mathrm{GlcNac/LF/CRP/C1}]\right)\right)$$
$$-\left(\left(\mathrm{kf02}_1 \cdot [\mathrm{C4BP}] \cdot [\mathrm{GlcNac/LF/CRP}] - \mathrm{kf02}_2 \cdot [\mathrm{C4BP/GlcNac/LF/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{ke05}_1 \cdot [\mathrm{GlcNac/LF/CRP}] \cdot [\mathrm{MASP}] - \mathrm{ke05}_2 \cdot [\mathrm{GlcNac/LF/CRP/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{GlcNac/LF/CRP/C1}]\right)}{\mathrm{d}t} = +\left(\left(\mathrm{ke02}_1 \cdot [\mathrm{GlcNac/LF/CRP}] \cdot [\mathrm{C1}] - \mathrm{ke02}_2 \cdot [\mathrm{GlcNac/LF/CRP/C1}]\right)\right)$$

$$\frac{\mathrm{d}\left([\mathrm{C4BP}]\right)}{\mathrm{d}t} = -\left(\left(\mathrm{kf01}_1 \cdot [\mathrm{C4BP}] \cdot [\mathrm{PC/CRP}] - \mathrm{kf01}_2 \cdot [\mathrm{C4BP/PC/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{kf02}_1 \cdot [\mathrm{C4BP}] \cdot [\mathrm{GlcNac/LF/CRP}] - \mathrm{kf02}_2 \cdot [\mathrm{C4BP/GlcNac/LF/CRP}]\right)\right)$$
$$-\left(\left(\mathrm{kf04}_1 \cdot [\mathrm{C4BP}] \cdot [\mathrm{C4b}] - \mathrm{kf04}_2 \cdot [\mathrm{C4BP/C4b}]\right)\right)$$
$$-\left(\left(\mathrm{kf06}_1 \cdot [\mathrm{C4b/C2a}] \cdot [\mathrm{C4BP}] - \mathrm{kf06}_2 \cdot [\mathrm{C4b/C2a/C4BP}]\right)\right)$$
$$-\left(\left(\mathrm{kf07}_1 \cdot [\mathrm{dC4b/C2a}] \cdot [\mathrm{C4BP}] - \mathrm{kf07}_2 \cdot [\mathrm{dC4b/C2a/C4BP}]\right)\right)$$
$$-\left(\mathrm{k1}_{(\mathrm{tmp1})} \cdot [\mathrm{C4BP}]\right)$$
$$-\left(\left(\mathrm{k1}_{(\mathrm{tmp}_f1)} \cdot [\mathrm{C4BP}] \cdot [\mathrm{PC/CRP/LF}] - \mathrm{k2}_{(\mathrm{tmp}_f1)} \cdot [\mathrm{C4BP/PC/CRP/LF}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{C4BP/PC/CRP}]\right)}{\mathrm{d}t} = + \left(\left(\text{kf01}_1 \cdot [\text{C4BP}] \cdot [\text{PC/CRP}] - \text{kf01}_2 \cdot [\text{C4BP/PC/CRP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{C4BP/GlcNac/LF/CRP}]\right)}{\mathrm{d}t} = + \left(\left(\text{kf02}_1 \cdot [\text{C4BP}] \cdot [\text{GlcNac/LF/CRP}] - \text{kf02}_2 \cdot [\text{C4BP/GlcNac/LF/CRP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{iC4b/C2a}]\right)}{\mathrm{d}t} = + \left(\text{kf03} \cdot [\text{C4b/C2a}] \cdot [\text{C4BP}]\right)$$

$$\frac{\mathrm{d}\left([\text{C4BP/C4b}]\right)}{\mathrm{d}t} = + \left(\left(\text{kf04}_1 \cdot [\text{C4BP}] \cdot [\text{C4b}] - \text{kf04}_2 \cdot [\text{C4BP/C4b}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{C4b/C2a/C4BP}]\right)}{\mathrm{d}t} = + \left(\left(\text{kf06}_1 \cdot [\text{C4b/C2a}] \cdot [\text{C4BP}] - \text{kf06}_2 \cdot [\text{C4b/C2a/C4BP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{dC4b/C2a/C4BP}]\right)}{\mathrm{d}t} = + \left(\left(\text{kf07}_1 \cdot [\text{dC4b/C2a}] \cdot [\text{C4BP}] - \text{kf07}_2 \cdot [\text{dC4b/C2a/C4BP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{PC/CRP/LF/C1}]\right)}{\mathrm{d}t} = + \left(\left(\text{kd05}_1 \cdot [\text{PC/CRP/LF}] \cdot [\text{C1}] - \text{kd05}_2 \cdot [\text{PC/CRP/LF/C1}]\right)\right)$$
$$- \left(\left(\text{kd08}_1 \cdot [\text{PC/CRP/LF/C1}] \cdot [\text{MASP}] - \text{kd08}_2 \cdot [\text{PC/CRP/LF/C1/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{C4BP/PC/CRP/LF}]\right)}{\mathrm{d}t} = + \left(\left(\text{k1}_{(\text{tmp}_f1)} \cdot [\text{C4BP}] \cdot [\text{PC/CRP/LF}] - \text{k2}_{(\text{tmp}_f1)} \cdot [\text{C4BP/PC/CRP/LF}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{GlcNac/LF/CRP/MASP}]\right)}{\mathrm{d}t} = + \left(\left(\text{ke05}_1 \cdot [\text{GlcNac/LF/CRP}] \cdot [\text{MASP}] - \text{ke05}_2 \cdot [\text{GlcNac/LF/CRP/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{PC/CRP/LF/C1/MASP}]\right)}{\mathrm{d}t} = + \left(\left(\text{kd08}_1 \cdot [\text{PC/CRP/LF/C1}] \cdot [\text{MASP}] - \text{kd08}_2 \cdot [\text{PC/CRP/LF/C1/MASP}]\right)\right)$$
$$+ \left(\left(\text{kd09}_1 \cdot [\text{PC/CRP/LF/MASP}] \cdot [\text{C1}] - \text{kd09}_2 \cdot [\text{PC/CRP/LF/C1/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{GlcNac/HF}]\right)}{\mathrm{d}t} = + \left(\left(\text{kg01}_1 \cdot [\text{X}] \cdot [\text{HF}] - \text{kg01}_2 \cdot [\text{GlcNac/HF}]\right)\right)$$
$$- \left(\left(\text{kg02}_1 \cdot [\text{GlcNac/HF}] \cdot [\text{MASP}] - \text{kg02}_2 \cdot [\text{GlcNac/HF/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{HF}]\right)}{\mathrm{d}t} = - \left(\left(\text{kg01}_1 \cdot [\text{X}] \cdot [\text{HF}] - \text{kg01}_2 \cdot [\text{GlcNac/HF}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{GlcNac/HF/MASP}]\right)}{\mathrm{d}t} = + \left(\left(\text{kg02}_1 \cdot [\text{GlcNac/HF}] \cdot [\text{MASP}] - \text{kg02}_2 \cdot [\text{GlcNac/HF/MASP}]\right)\right)$$

$$\frac{\mathrm{d}\left([\text{X}]\right)}{\mathrm{d}t} = - \left(\left(\text{kg01}_1 \cdot [\text{X}] \cdot [\text{HF}] - \text{kg01}_2 \cdot [\text{GlcNac/HF}]\right)\right)$$