

Model equations

$$d[\text{FasR}]/dt=(k_2[\text{Fas.Rec.Lig}])-(k_1[\text{FasR}][\text{FasL}])$$

$$d[\text{FasL}]/dt=(k_2[\text{Fas.Rec.Lig}])-(k_1[\text{FasR}][\text{FasL}])$$

$$d[\text{Fas.Rec.Lig}]/dt=(k_1[\text{FasR}][\text{FasL}]+k_4[\text{FasComplex}])-(k_2[\text{Fas.Rec.Lig}]+k_3[\text{Fas.Rec.Lig}][\text{FADD}])$$

$$d[\text{FADD}]/dt=(k_4[\text{FasComplex}]+k_9[\text{P8.FasComplex}]-$$
$$(k_3[\text{Fas.Rec.Lig}][\text{FADD}]+k_{10}[\text{Procaspase3}][\text{Caspase3}][\text{FADD}]))$$

$$d[\text{FasComplex}]/dt=(k_3[\text{Fas.Rec.Lig}][\text{FADD}]+k_6[\text{P8.FasComplex}]-$$
$$(k_4[\text{FasComplex}]+k_5[\text{Procaspase8}][\text{FasComplex}][\text{Procaspase3}]+k_8[\text{Caspase8}][\text{FasComplex}][\text{Procaspase8}]))$$

$$d[\text{P8.FasComplex}]/dt=(k_5[\text{Procaspase8}][\text{FasComplex}][\text{Procaspase3}]+k_8[\text{Caspase8}][\text{Procaspase8}][\text{Procaspase8}]+k_{10}[\text{Procaspase3}][\text{Caspase3}][\text{FADD}])-(k_6[\text{P8.FasComplex}]+k_7[\text{P8.FasComplex}]+k_9[\text{P8.FasComplex}])$$

$$d[\text{Procaspase8}]/dt=(k_6[\text{P8.FasComplex}]+k_7[\text{P8.FasComplex}]-$$
$$(k_5[\text{Procaspase8}][\text{FasComplex}][\text{Procaspase3}]+k_8[\text{Caspase8}][\text{Procaspase8}]))$$

$$d[\text{Procaspase3}]/dt=(k_{12}[\text{C8.P3.Complex}]+k_{13}[\text{C8.P3.Complex}]+k_6[\text{P8.FasComplex}]+k_9[\text{P8.FasComplex}]-$$
$$(k_{11}[\text{Caspase8}][\text{Procaspase3}]+k_{10}[\text{Procaspase3}][\text{Caspase3}][\text{FADD}]+k_{14}[\text{Caspase8}][\text{Caspase3}][\text{Procaspase3}]+k_5[\text{Procaspase8}][\text{FasComplex}][\text{Procaspase3}]))$$

$$d[\text{Caspase8}]/dt=(k_7[\text{P8.FasComplex}]+k_{12}[\text{C8.P3.Complex}]+k_{13}[\text{C8.P3.Complex}]-$$
$$(k_{11}[\text{Caspase8}][\text{Procaspase3}]+k_8[\text{Caspase8}][\text{Procaspase8}]+k_{14}[\text{Caspase8}][\text{Caspase3}][\text{Procaspase3}]))$$

$$d[\text{Caspase3}]/dt=(k_{13}[\text{C8.P3.Complex}]+k_{16}[\text{inhi.Complex3}]+k_9[\text{P8.FasComplex}]-$$
$$(k_{15}[\text{Caspase3}][\text{CIAP}]+k_{14}[\text{Caspase8}][\text{Caspase3}][\text{Procaspase3}]+k_{10}[\text{Procaspase3}][\text{Caspase3}][\text{FADD}]))$$

$$d[\text{C8.P3.Complex}]/dt=(k_{11}[\text{Caspase8}][\text{Procaspase3}]+k_{14}[\text{Caspase8}][\text{Caspase3}][\text{Procaspase3}]-$$
$$(k_{12}[\text{C8.P3.Complex}]+k_{13}[\text{C8.P3.Complex}]))$$

$$d[\text{xIAP}]/dt=(k_{16}[\text{inhi.Complex3}])-(k_{15}[\text{Caspase3}][\text{xIAP}])$$

$$d[\text{inhi.Complex3}]/dt=(k_{15}[\text{Caspase3}][\text{xIAP}])-(k_{16}[\text{inhi.Complex3}])$$