



Differential Equation System “OUTPUT”

1 Rate Laws

1.1 Reaction: re3

$$v_1 = [s_9] \cdot [s_{17}] \quad (1)$$

1.2 Reaction: re4

$$v_2 = [s_{10}] \cdot k_{B0032} \quad (2)$$

1.3 Reaction: re7

$$v_3 = [s_{10}] \cdot d \quad (3)$$

1.4 Reaction: re8

$$v_4 = [s_{11}] \cdot d \quad (4)$$

2 Equations

2.1 Species: s9 (gen_CFP)

$$\frac{d[s_9]}{dt} = 0 \quad (5)$$

2.2 Species: s10 (mRNA_CFP)

$$\frac{d[s_{10}]}{dt} = -v_3 + v_1 \quad (6)$$

2.3 Species: s11 (CFP)

$$\frac{d[s_{11}]}{dt} = -v_4 + v_2 \quad (7)$$

2.4 Species: s12 (transcriptie_CFP)

$$\frac{d[s_{12}]}{dt} = -v_1 \quad (8)$$

2.5 Species: s13 (translatie_CFP)

$$\frac{d[s_{13}]}{dt} = -v_2 \quad (9)$$

2.6 Species: s15 (sa10_degraded)

$$\frac{d[s_{15}]}{dt} = v_3 \quad (10)$$

2.7 Species: s16 (sa11_degraded)

$$\frac{d[s_{16}]}{dt} = v_4 \quad (11)$$

2.8 Species: s17 (OmpF_var_transcr_rate)

$$\frac{d[s_{17}]}{dt} = 0 \quad (12)$$

3 Parameters

Parameter	Value
k_{B0032}	0.0501
d	1.05E-4
d	0.0023

4 Species

Species	Initial concentration	compartment
s_9	1.0	default
s_{10}	0.0	default
s_{11}	0.0	default
s_{12}	0.0	default
s_{13}	0.0	default
s_{15}	0.0	default
s_{16}	0.0	default
s_{17}	0.025	default

5 Compartments

Compartment	Volume
<i>default</i>	1.0