

## 1 “global\_variables” component

This component has no equations.

## 2 “cAMP” component

$$\frac{d(cAMP)}{d(time)} = (delta\_cAMP\_rxn1 + delta\_cAMP\_rxn3 + delta\_cAMP\_rxn7 + delta\_cAMP\_rxn9 + delta\_cAMP\_rxn10 + delta\_cAMP\_rxn13 + delta\_cAMP\_rxn14 + delta\_cAMP\_rxn15)$$

## 3 “ATP” component

$$\frac{d(ATP)}{d(time)} = (delta\_ATP\_rxn1 + delta\_ATP\_rxn3 + delta\_ATP\_rxn7 + delta\_ATP\_rxn9)$$

## 4 “AC1\_8” component

$$\frac{d(AC1_8)}{d(time)} = (delta\_AC1_8\_rxn0 + delta\_AC1_8\_rxn2)$$

## 5 “Ca4\_CaM” component

$$\frac{d(Ca4\_CaM)}{d(time)} = (delta\_Ca4\_CaM\_rxn0 + delta\_Ca4\_CaM\_rxn15)$$

## 6 “Ca4\_CaM\_AC1.8” component

$$\frac{d(\text{Ca4\_CaM\_AC1.8})}{d(\text{time})} = \text{delta\_Ca4\_CaM\_AC1.8\_rxn0}$$

## 7 “G\_s\_alpha” component

$$\frac{d(\text{G\_s\_alpha})}{d(\text{time})} = (\text{delta\_G\_s\_alpha\_rxn2} + \text{delta\_G\_s\_alpha\_rxn6} + \text{delta\_G\_s\_alpha\_rxn8})$$

## 8 “G\_s\_AC1.8” component

$$\frac{d(\text{G\_s\_AC1.8})}{d(\text{time})} = \text{delta\_G\_s\_AC1.8\_rxn2}$$

## 9 “AC2” component

$$\frac{d(\text{AC2})}{d(\text{time})} = (\text{delta\_AC2\_rxn5} + \text{delta\_AC2\_rxn4} + \text{delta\_AC2\_rxn8})$$

## 10 “AC2\_” component

$$\frac{d(\text{AC2\_})}{d(\text{time})} = (\text{delta\_AC2\_rxn4} + \text{delta\_AC2\_rxn5} + \text{delta\_AC2\_rxn6})$$

## 11 “PKC” component

This component has no equations.

## 12 “G\_s\_AC2\_” component

$$\frac{d(\text{G\_s\_AC2\_})}{d(\text{time})} = \text{delta\_G\_s\_AC2\_rxn6}$$

### 13 “G\_s\_AC2” component

$$\frac{d(G\_s\_AC2)}{d(time)} = \text{delta\_G\_s\_AC2\_rxn8}$$

### 14 “PDE” component

$$\frac{d(PDE)}{d(time)} = (\text{delta\_PDE\_rxn12} + \text{delta\_PDE\_rxn11})$$

### 15 “AMP” component

$$\frac{d(AMP)}{d(time)} = (\text{delta\_AMP\_rxn10} + \text{delta\_AMP\_rxn13} + \text{delta\_AMP\_rxn14} + \text{delta\_AMP\_rxn16})$$

### 16 “PDE\_” component

$$\frac{d(PDE\_)}{d(time)} = (\text{delta\_PDE\_rxn11} + \text{delta\_PDE\_rxn12})$$

### 17 “PKA” component

This component has no equations.

### 18 “PDE1” component

$$\frac{d(PDE1)}{d(time)} = \text{delta\_PDE1\_rxn15}$$

### 19 “Ca4\_CaM\_PDE1” component

$$\frac{d(Ca4\_CaM\_PDE1)}{d(time)} = \text{delta\_Ca4\_CaM\_PDE1\_rxn15}$$

## **20 “reaction0” component**

This component has no equations.

## **21 “reaction1” component**

This component has no equations.

## **22 “reaction2” component**

This component has no equations.

## **23 “reaction3” component**

This component has no equations.

## **24 “reaction4” component**

This component has no equations.

## **25 “reaction5” component**

This component has no equations.

## **26 “reaction6” component**

This component has no equations.

## **27 “reaction7” component**

This component has no equations.

## **28 “reaction8” component**

This component has no equations.

## **29 “reaction9” component**

This component has no equations.

## **30 “reaction10” component**

This component has no equations.

## **31 “reaction11” component**

This component has no equations.

## **32 “reaction12” component**

This component has no equations.

## **33 “reaction13” component**

This component has no equations.

## **34 “reaction14” component**

This component has no equations.

## **35 “reaction15” component**

This component has no equations.

## **36 “reaction16” component**

This component has no equations.