## 1 Full report

## 1.1 Input data

Input file name:

UPO.txt

File contents:

#mathmatical symbols used in rate constant names (e.g. k-1) must be escaped with a prece

```
E, k1; [A], EA/EP
EA/EP, k_-1, E
EA/EP, k2, E*
E*, k_-2, EA/EP
E*, k3; [B], E*B/EQ
E*B/EQ, k_-3, E*
E*B/EQ, k6, E
E, k_-6; [Q], E*B/EQ
E*, k4; [A], E*A/EPR
E*A/EPR, k_-4, E*
E*A/EPR, k7, E
E, k_-7; [P], E*A/EPR
E, k8; [B], EB
EB, k_-8, E
=+: E*B/EQ, k6,
=-: E, k_-6; [Q],
=0: k_-6, k_-7, [P], [Q], k_-2
subsymbols: k_ib, k_ma, k_ma2, k_mb
subs:k8, k_-8/k_ib
subs:k1, (k_-1 + k2)/k_ma
subs:k4, (k_-4+k7)/k_ma2
subs:k3, (k_-3+k6)/k_mb
```

## 1.2 Parsed\_reactions

Reactions after parsing

E	$\xrightarrow{k_1[A]}$	EA/EP
EA/EP	$\xrightarrow{k_{-1}}$	E
EA/EP	$\xrightarrow{k_2}$	E*
E*	$\xrightarrow{k_{-2}}$	EA/EP
E*	$\xrightarrow{k_3[B]}$	E*B/EQ
E*B/EQ	$\xrightarrow{k_{-3}}$	E*
E*B/EQ	$\xrightarrow{k_6}$	E
E	$\xrightarrow{k_{-6}[Q]}$	E*B/EQ
E*	$\xrightarrow{k_4[A]}$	E*A/EPR
E*A/EPR	$\xrightarrow{k_{-4}}$	E*
E*A/EPR	$\xrightarrow{k_7}$	E
E	$\xrightarrow{k_{-7}[P]}$	E*A/EPR
E	$\xrightarrow{k_8[B]}$	EB
EB	$\xrightarrow{k-8}$	E