

Table S2 Effect of the number of search parameters on selection of potentially influential parameters

The table derives from **Figure S5**, where details in the simulation method are described. Application of a threshold value of 10^{-8} to the amplitude sensitivities separates the potentially influential parameters (**Equation 10**), as marked in boldface. The kinetic parameters are sorted according to the minimum sensitivities in the descending order. The numbers of search parameters are 3 (A), 6 (B), 9 (C), 12 (D), 16 (E), 25 (F), and 36 (F), respectively. For a search parameter number of ≥ 12 , the members of the seventeen potentially influential parameters are the same.

A																	3																		
R[1]	D[7]	A[2]	T[1]	K[2]	D[4]	R[3]	T[3]	D[10]	D[9]	D[11]	S[4]	S[3]	A[3]	D[1]	R[2]	V[2]	P[1]	D[8]	V[3]	D[3]	D[6]	S[5]	S[6]	D[2]	V[4]	A[1]	V[1]	S[2]	S[1]	D[5]	K[1]	K[4]	B[3]	B[2]	B[1]
B																	6																		
K[2]	D[7]	D[1]	T[1]	P[1]	D[2]	R[1]	D[3]	V[2]	S[2]	S[1]	S[3]	S[4]	R[2]	D[6]	D[4]	D[5]	K[1]	V[1]	R[3]	T[3]	D[9]	D[10]	A[2]	D[11]	A[3]	V[3]	D[8]	S[5]	S[6]	K[4]	A[1]	V[4]	B[1]	B[2]	B[3]
C																	9																		
D[7]	K[2]	S[4]	S[3]	R[1]	T[1]	D[3]	D[5]	P[1]	R[2]	D[6]	D[1]	D[2]	K[1]	S[1]	S[2]	D[4]	V[2]	V[1]	S[5]	S[6]	A[1]	A[2]	A[3]	R[3]	B[1]	B[2]	B[3]	V[3]	V[4]	D[8]	D[9]	D[10]	D[11]	T[3]	K[4]
D																	12																		
D[1]	T[1]	D[4]	D[3]	S[3]	S[4]	D[5]	P[1]	D[7]	S[1]	S[2]	V[1]	K[1]	D[6]	V[2]	D[2]	K[2]	R[3]	T[3]	D[9]	D[10]	A[2]	A[1]	D[8]	D[11]	S[6]	S[5]	A[3]	R[1]	R[2]	B[1]	B[2]	B[3]	V[3]	V[4]	K[4]
E																	16																		
S[1]	S[2]	D[1]	K[1]	D[4]	D[3]	P[1]	S[3]	S[4]	D[2]	D[6]	D[5]	T[1]	V[1]	D[7]	V[2]	K[2]	R[3]	K[4]	S[6]	A[3]	D[11]	V[3]	T[3]	A[1]	D[9]	D[10]	S[5]	A[2]	R[1]	R[2]	B[1]	B[2]	B[3]	V[4]	D[8]
F																	25																		
D[4]	T[1]	K[2]	P[1]	D[7]	S[3]	K[1]	D[1]	D[2]	S[2]	V[1]	D[3]	D[6]	V[2]	S[1]	D[5]	S[4]	S[5]	S[6]	A[1]	A[2]	A[3]	R[1]	R[2]	R[3]	B[1]	B[2]	B[3]	V[3]	V[4]	D[8]	D[9]	D[10]	D[11]	T[3]	K[4]
G																	36																		
D[1]	D[3]	K[1]	S[2]	P[1]	S[1]	D[4]	S[3]	S[4]	D[5]	V[1]	D[7]	T[1]	D[2]	K[2]	D[6]	V[2]	S[5]	S[6]	A[1]	A[2]	A[3]	R[1]	R[2]	R[3]	B[1]	B[2]	B[3]	V[3]	V[4]	D[8]	D[9]	D[10]	D[11]	T[3]	K[4]