

Model Name:

Kinetic titration - decaying surface

Model Type:

General

Formula:

$$R0 \cdot \exp(-k_{bk} \cdot (t - t_0)) + LA + RI1 \cdot \$1 + RI2 \cdot \$2 + RI3 \cdot \$3 + \text{Offset};$$

$$\$1 = (\text{sign}(t - (\text{ton1})) - \text{sign}(t - (\text{ton1} + c_time))) / 2;$$

$$\$2 = (\text{sign}(t - (\text{ton2})) - \text{sign}(t - (\text{ton2} + c_time))) / 2;$$

$$\$3 = (\text{sign}(t - (\text{ton3})) - \text{sign}(t - (\text{ton3} + c_time))) / 2;$$

$$\$4 = kt \cdot (\$1 \cdot \text{Conc} / (F^2) + \$2 \cdot \text{Conc} / F + \$3 \cdot \text{Conc} / (\text{Conc} - L));$$

$$\$5 = k_a \cdot L \cdot A + k_d \cdot LA;$$

$$A = \$4 - \$5|0;$$

$$L = -\$5|R_{\text{max}};$$

$$LA = \$5|0;$$
Independant Variable: t**Description:**

Three consecutive injections of analyte on a decaying surface

Parameters:

Name	Fit	Allow Neg.	Keyword
ka	Global	No	No
kd	Global	No	No
kt	Global	No	No
Rmax	Local	No	No
RI1	Local	Yes	No
RI2	Local	Yes	No
RI3	Local	Yes	No
Conc	No	No	Yes
ton1	No	No	Yes

ton2	No	No	Yes
ton3	No	No	Yes
c_time	No	No	Yes
F	No	No	Yes
Offset	Local	Yes	No
R0	No	No	No
t0	No	No	No
kbk	Global	No	No