

**Model Name:**

kinetic titration - simulation

**Model Type:**

General

**Formula:**

$$\begin{aligned}
 &LA + RI1 * \$1 + RI2 * \$2 + RI3 * \$3 + RI4 * \$4 + RI5 * \$5 + (\text{Drift} * (t - \text{ton1})); \\
 &\$1 = (\text{sign}(t - (\text{ton1})) - \text{sign}(t - (\text{ton1} + c\_time))) / 2; \\
 &\$2 = (\text{sign}(t - (\text{ton2})) - \text{sign}(t - (\text{ton2} + c\_time))) / 2; \\
 &\$3 = (\text{sign}(t - (\text{ton3})) - \text{sign}(t - (\text{ton3} + c\_time))) / 2; \\
 &\$4 = (\text{sign}(t - (\text{ton4})) - \text{sign}(t - (\text{ton4} + c\_time))) / 2; \\
 &\$5 = (\text{sign}(t - (\text{ton5})) - \text{sign}(t - (\text{ton5} + c\_time))) / 2; \\
 &\$6 = kt * (\$1 * \text{conc} / (F^4) + \$2 * \text{conc} / (F^3) + \$3 * \text{conc} / (F^2) + \$4 * \text{conc} / (F) + \$5 * \text{conc} - L); \\
 &\$7 = ka * L * A - kd * LA; \\
 &L = \$6 - \$7|0; \\
 &A = -\$7|Rmax; \\
 &LA = \$7|0;
 \end{aligned}$$
**Independant Variable:** t**Description:**

Fits five sequential injections with constant injection time and constant dilution factor

**Parameters:**

Name	Fit	Allow Neg.	Keyword
ka	No	No	No
kd	No	No	No
Rmax	No	No	No
kt	No	No	No
RI1	No	Yes	No
RI2	No	Yes	No

RI3	No	Yes	No
RI4	No	Yes	No
RI5	No	Yes	No
Conc	No	No	Yes
ton1	No	No	Yes
ton2	No	No	Yes
ton3	No	No	Yes
ton4	No	No	Yes
ton5	No	No	Yes
c_time	No	No	Yes
F	No	No	Yes
Drift	No	Yes	No