



**Submitter/Affiliation:** (Please include your contact details and affiliations so that we can appropriately credit your submission to SigPath)

<b>First Name:</b>	<b>Last Name:</b>	<b>Phone:</b>
<b>Title:</b>	<b>Institution:</b>	<b>Dept:</b>
<b>Address:</b>		<b>E-mail:</b>

**Reaction:** (One reaction per form please, as listed in the reaction submission form)

<b>Equation:</b>	
<b>Notes:</b> (Please describe sites affected during the reaction)	

**Reaction Rate Parameters:** (Describe the kinetic of the reaction when it proceeds spontaneously.)

Constant	value	units	Example 1:	Example 2:
$K_1$ (Forward rate)			$A+B \xrightleftharpoons{K_1} C+D$	$S+E \xrightleftharpoons{K_1} E.S \xrightarrow{K_p} E+P$
$K_{-1}$ (backward rate)				S: Substrate, E: Enzyme, P: Product

**Enzymatic Reaction Parameters:**

<b>Enzyme Name:</b> (same as in the equation above)			<b>Additional Enzyme:</b> (optional) Use when a second enzyme can also catalyze the reaction		
Constant	value	units	Constant	value	units
$K_m$ (Michaelis Constant)			$K_m$ (Michaelis Constant)		
$K_{-1}/K_p$ (Ratio)			$K_{-1}/K_p$ (Ratio)		
$K_p$ (Reaction rate)			$K_p$ (Reaction rate)		
$V_{max}$ (Maximum velocity)			$V_{max}$ (Maximum velocity)		

$K_m = (K_p + K_{-1}) / K_1$  and  $V_{max} = K_p \cdot E_T$  ( $E_T$ : Total concentration of the enzyme)

**Related References:**

Title	Authors	Year	Journal	Pubmed ID

**Submission Instructions:**

You can e-mail this SigPath reaction submission form as an attachment to [web@inka.mssm.edu](mailto:web@inka.mssm.edu), fax it to (212) 860-3369 or mail it to the following address: Institute of Computational Biomedicine (ICB), Mount Sinai School of Medicine, 1 Gustave L. Levy Place, New York, NY 10029.

**Note:** You can complete this form electronically using Microsoft Word. Click in the appropriate entry area to enter data in a table. Please indicate the page number and total number of pages that you are submitting in the space provided below.

<b>Date:</b>	<b>Spid:</b> (For ICB use only)	<b>Page:</b>	of
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