

Enzyme Kinetics Analysis Report

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1 Introduction

Enzyme kinetics is the study of the chemical reactions that are catalyzed by enzymes. This report analyzes two sets of experimental data on enzyme kinetics, one with an inhibitor and one without an inhibitor. Calculates the V_{max} , K_M and K_I values.

2 Input data

(a) Reaction without inhibitor		
[S](mmol/l)	[I](mmol/l)	V ($\mu\text{mol/L/min}$)
1	0	0.67
2	0	1.13
3	0	1.48
4	0	1.74
5	0	1.98
(b) Reaction with inhibitor		
[S](mmol/l)	[I](mmol/l)	V ($\mu\text{mol/L/min}$)
1	1	0.05
2	1	0.10
3	1	0.15
4	1	0.16
5	1	0.18

Table 1: Reaction rates with and without inhibitor