

Chemistry 4000/5000/7000 Fall 2010 Assignment 5

Due: Friday, Oct. 15, 4:00 p.m.

Marks: 12

In this assignment, you will become familiar with resources useful for modeling biochemical reactions by looking up data for the enzyme **aldolase**.

1. What are the EC number and recommended name of aldolase? [2 marks]
2. What reaction does this enzyme catalyze? [2 marks]
3. What are the values of v_{\max} and K_M for this enzyme in (a) *Saccharomyces cerevisiae*, and (b) human cells? In the case of humans, please indicate the cell type to which your data applies. In either case, indicate the original literature source of the data. If you need to do a calculation, show the formula(s) used. [8 marks]

Happy Thanksgiving!