



Modelling – Lysozyme activity test

● Aim

To test whether the enzymes expressed by our group are active, we designed a series of enzyme activity experiments. Lysozyme activity experiments are an important part of this.

● Materials

Lysozyme Activity Assay Kit, Catalog Number LY0100 (Sigma-Aldrich);

Lysozyme C (serial number 6), Lysozyme G (serial number 7) ;

Transparent 96-well plate;

● Procedure

Based on the instructions in the Lysozyme Activity Assay Kit, we designed the relevant experiments as follows:

1. Pipette 800 μL of the *Micrococcus* cell suspension into one cuvette for a blank, one for a control, and one for each sample.

2. Equilibrate the cuvettes to 25 °C.

3. Monitor the A450 until constant using a thermostatted spectrophotometer.

4. Add 30 μL of Reaction Buffer to the blank cuvette, 30 μL of Lysozyme



Solution to the control cuvette, and 30 μ L of Test Sample to the remaining cuvettes.

5. Immediately mix by inversion and record the decrease in A450 for ~5 minutes. Obtain the maximum linear rate (Δ A450/minute) for both the test and the blank.

