

1. Homeworks

1.

2.

3.

2. On-demand droplet generation

Design of the experiment:

Shortly describe which samples you used/prepared and describe the sequence of generated droplets.

Results:

Insert the picture of the measured data.

Conclusion:

Estimate the concentration of HCl that the unknown enzyme produced.

3. Screening of reaction conditions suitable for luciferase enzyme on the chip

1. Briefly describe the approach of how to find the pH optimum on this microfluidic platform. (Focus on the purpose of the experiment rather than on experimental details)
2. Name at least one aspect of how pH of the reaction mixture influences enzymatic reaction.
3. Which other parameters (except for pH) of the enzymatic reaction can be regulated using this microfluidic platform?