

September 2025

Week 1 | 9.19 - 9.25

This week, we verified the internalization of DNA origami and assessed the overall function of DNA origami using blue/white selection.

- 1) We loaded F-H onto DNA origami with attached aptamers and G4/hemin DNAzymes.
- 2) We incubated *E. coli* MG1655 with the origami.
- 3) We then visualized the internalization of the origami using a laser scanning microscope. As a result, there was a higher intracellular uptake of the origami compared with the control group.
- 4) To assess the overall function of DNA origami, we loaded G4/hemin DNAzymes, sgRNA_L/Cas9 complex, and aptamers onto DNA origami.
- 5) We incubated *E. coli* MG1655 with the origami in culture medium containing X-gal and IPTG.
- 6) As a result, the experiment group presented both white and blue spots, while the control group only presented blue spots.