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Evagreen Dye Fluorescence Verification

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This protocol is to establish the relationship between Evagreen Dye fluorescent intensity and DNA concentration.

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Preparation

- 1 Take 30 μL of 10μM ssDNA (T4 ligation primer) into a new eppendorf
- 2 Dilute 10μM ssDNA into 1μM:

Take ■3 µL of 10µM ssDNA and ■27 µL RNase-free water into a new eppendorf

3 Dilute 1µM ssDNA into 100nM :

Take □3 µL of 1µM ssDNA and □27 µL RNase-free water into a new eppendorf

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4 Dilute 100nM ssDNA into 10nM :

Take ■3 µL of 100nM ssDNA and ■27 µL RNase-free water into a new eppendorf

5 Dilute 10nM ssDNA into 1nM:

Take □3 µL of 10nM ssDNA and □27 µL RNase-free water into a new eppendorf

6 Dilute 1nM ssDNA into 100pM:

Take ■3 µL of 1nM ssDNA and ■27 µL RNase-free water into a new eppendorf

7 Dilute 100pM ssDNA into 10pM:

Take ■3 µL of 100pM ssDNA and ■27 µL RNase-free water into a new eppendorf

8 Add $\mathbf{1.5} \, \mu \mathbf{L}$ of 20X evagree dye into each eppendorf.

Measure

- 9 Respectively load **20 μL** of 10μM,1μM, 100nM, 10nM, 1nM, 100pM and 10pM ssDNA into each well
- 10 Measure the fluorescence excitation and emission intensity