

HoPo1 Lab Notes Scan

HoPo (Homopolymer Experiment)

Add the following components to 1.5-ml microcentrifuge tubes on ice.

	A	B	C
1	Table A	Amount	Final Concentration
2	dNTP	100 μ L	100 μ M
3	oligonucleotide	0.25 to 2.0 nmol	5 to 40 nmol/mL
4	5X TdT Reaction buffer	10 μ L	1X
5	autoclaved, distilled water	up to 49 μ L	(total volume) 50 μ L

	A	B	C	D	E	F
1	Table B	Function	1	2	3	4
2	A Primers	Just Primers (No TdT)	.75h			3h
3	B TdT	Just Primers (No TdT)	.75h			3h
4	C P+T	Test 1 (Primers, TdT)	.75h	1.5h	2.25h	3h
5	D P+T	Test 2 (Primers, TdT)	.75h	1.5h	2.25h	3h

1. Add 1 μ L TdT (15 units/ μ L). Mix by gentle pipetting. (Still on ice)
2. Incubate at 37°C for given time, see above, table B.
3. Stop the reaction by bringing the solution to 95°C for 10 minutes.
4. Prepare Agarose (Use Cobalt Chloride as a buffer for Gel)
 - a. To volume 80mL of H₂O and Buffer, add 2g Agarose
 - b. Heat in increments in microwave until fully dissolved
 - c. Pour into gel casting tray
 - d. Place well template (comb) in correct slot
 - e. Let cool
 - f. More info: http://www.edvotek.com/Electrophoresis_Guide.pdf
5. Run Gel
 - a. 120V until control is distinctly visible, Watch tenaciously
6. Analyze Gel on Gel Viewer
7. Record (Pictures, notes) and Prosper

$$\frac{6000g \text{ DNA solution}}{\text{mol DNA}} \cdot \left(\frac{1 \text{ kg solution}}{1 \text{ L}} \right)^{-1} = \frac{6 \text{ L DNA solution}}{\text{mol DNA}}$$