Procedure for growing λgt10 with onion cDNA inserts
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1. Two nights before growing phage, streak *E. coli* strain C600 Hfl on LB Agar with tetracycline at 15 μg/ml. Grow overnight at 37 C.
2. The night before growing phage, pick a single colony of C600 Hfl from LB + tet plate and place in 5 ml liquid LB with 50 μl 1 M $MgSO_4$ and 50 μl 20% Maltose (Do not add tetracycline). Grow overnight in shaking incubator at 37 C and 225 rpm.
3. A) Aliquot 90 μl phage diluent into sterile microfuge tube;
   B) Add 10 μl phage from microtiter plate to the above tube. It may be necessary to do additional 10 and 100 fold dilutions;
   C) Add 100 μl fresh C600 Hfl bacteria from LB liquid culture and vortex;
   D) Place in 37 C water bath for 30 minutes;
   E) Add culture + phage to 5 ml of top agar with 50 μl of 1 M $MgSO_4$ at 50 C;
   F) Pour top agar and bacteria onto LB plate without antibiotic;
   G) Place at 37 C overnight.
4. Harvest a single plaque using a sterile pasteur pipette and place in tube containing 600 μl phage diluent. Phage may be stored long term at -70 C.

PHAGE DILUENT:
10 mM Tris-Cl (pH 7.5)
8 mM $MgSO_4$
For long term storage add:
50 mM NaCl
0.01 % gelatin

1 M $MgSO_4$ (F.W. 246.47):
24.65 g $MgSO_4$
~75 ml H_2O
Dissolve and H_2O to 100 ml
Sterilize by autoclaving

LB, 500 m
5.0 g Bacto-Tryptone
2.5 g Yeast Extract
5.0 g Sodium Chloride
Adjust pH to 7.5 with sodium hydroxide
7.5 g Agar for plates
3.75 g Agar for top-agar tubes

Tetracycline
Prepare a 12.5 mg/ml solution of tetracycline hydrochloride in 50% ethanol. Sterilize by filtration, and store in aliquots at -20°C in the dark. For agar plates: Allow autoclaved media to cool to 50°C before adding tetracycline, to a final concentration of 15 μg/ml (1.0 to 1.2 ml stock solution per liter of media). Because tetracycline is light sensitive, store plates in the dark at 4°C.