

Dig Probe Synthesis
(NIBB clones June '05, or large scale prep)

DNA Prep-

- Digest 5ug DNA in a 50ul reaction (Not I for NIBB clones, unless internal site exists)
- run 2ul on check gel
- add 50ul H₂O
- Ph/CHCl₃ extract in 100ul volumes, spin 5' at 4°C
- add 250ul 100% EtOH, 10ul DEPC treated NaOAc
- incubate at -20° C 30', then spin 10-15' at 4°C
- resuspend pellet in 20ul DEPC H₂O

Probe Synthesis-

Master Mix 25ul rxn X (n) reactions

5X Txn buffer	5ul
100mM DTT	2.5ul
2.5mM Dig mix	5ul
DEPC H ₂ O	8.75ul

Mix above components, aliquot, then add:

DNA	1.25ul
Rnasin	0.5ul
T7	2ul

- Incubate 2hrs at 37°C
- Add 1ul Dnase, incubate 30' at 37°C
- run 1ul on check gel
- (Optional) Add 25ul 2X Bicarbonate, 20' at 60°C to hydrolyze probes
- Add 50-75ul DEPC H₂O to bring volume to 100ul
- Add 50ul NH₄Acetate, 500ul EtOH
- Incubate at -20°C for 30'
- Spin 10-15' at 4°C
- Resuspend in 100ul DEPC H₂O
- Run 1ul on 1% gel

Test probes at 1:10 (if low concentration on gel), 1:25, 1:50 and 1:100