

GEL ELECTROPHORESIS OF PCR PRODUCTS

Flexi-Buffer (Promega) or Thermopol (NEB) w/o Loading Dyes

Agarose Gel – 2% in 1X TAE (TAS, Mu, GMO rxns.) or 1% in 1X TAE (VNTR and Alu)

- Add SYBR Safe (10,000X-Invitrogen), (1 μ I/10 ml of agarose) to agarose after it has been cooled to 55-60°C.
- Pour gels.
- Prepare marker:
 - 0 **100 bp** (NEB): 0.5 μl in 9.5 μl TE (10.1) pH8.0 + 2 μl 6 X loading buffer.
 - \circ Low Molecular Weight (**LMW**) Marker (NEB): 1.0 μl in 9.0 μl TE (10.1) pH8.0 + 2 μl 6 X loading buffer.
- Add loading buffer to PCR reactions:
 - Spot 2 μl of loading buffer on clean plastic wrap for each sample.
 - \circ Transfer 10 μ l of the PCR reaction to the loading dye using a micropipet.
 - Mix the PCR reaction with dye by pipeting up and down (aspirate and expel the liquid several times)
- Load the mixture into the wells of the agarose gel.
- Record your sample positions on the master gel-loading template.
- Run gel at ~100 volts.

Flexi-Buffer w/ Loading Dyes

Agarose Gel – 2% in 1X TAE (TAS, Mu, GMO rxns.) or 1% in 1X TAE (VNTR and Alu)

- Add SYBR Safe to the agarose (See Above).
- Prepare marker (See Above)
- Load 10 μl of the PCR reaction into the wells of the agarose gel.
- Record your sample positions on the master gel-loading template.
- Run gel at ~100 volts.