

How to dilute DNA ladders Andersen Lab, 2016

We currently have two different kinds of ladder in the lab: Invitrogen 1 kb Plus DNA Ladder (catalog # 10787-018) and NEB 1 Kb DNA Ladder (catalog # N3232L). Use the Invitrogen 1 kb Plus DNA Ladder if you need size markers for fragments between 100 bp and 12 kb. Use the NEB 1 Kb ladder for size markers between 500 bp and 10 kb.

Invitrogen 1 kb Plus DNA Ladder

To make 2.5 ml of 0.1 $\mu\text{g}/\mu\text{l}$ working stock from 1 tube of Invitrogen 1 kb Plus DNA Ladder (250 μl , 1 $\mu\text{g}/\mu\text{l}$):

1. In a 15 ml conical, combine:
 - 250 μl Invitrogen 1 kb Plus DNA Ladder
 - 417 μl 6X loading dye
 - 1,833 μl dH₂O
2. Cap tube and vortex to mix
3. Aliquot 250 μl into 10 1.7 ml microfuge tubes
4. Store one tube at room temperature and put the remaining aliquots in the DNA ladder box in the -20°C freezer

NEB 1 kb Ladder

To make 10 ml of 0.05 $\mu\text{g}/\mu\text{l}$ working stock from 1 tube of NEB 1 Kb DNA Ladder (1000 μl , 0.5 $\mu\text{g}/\mu\text{l}$)

1. In a 15 ml conical, combine:
 - 1000 μl NEB 1 Kb DNA Ladder
 - 1,667 μl 6X loading dye
 - 7,333 μl dH₂O
2. Cap tube and vortex to mix
3. Aliquot 1000 μl into 10 1.7 ml microfuge tubes
4. Store one tube at room temperature and put the remaining aliquots in the DNA ladder box in the -20°C freezer