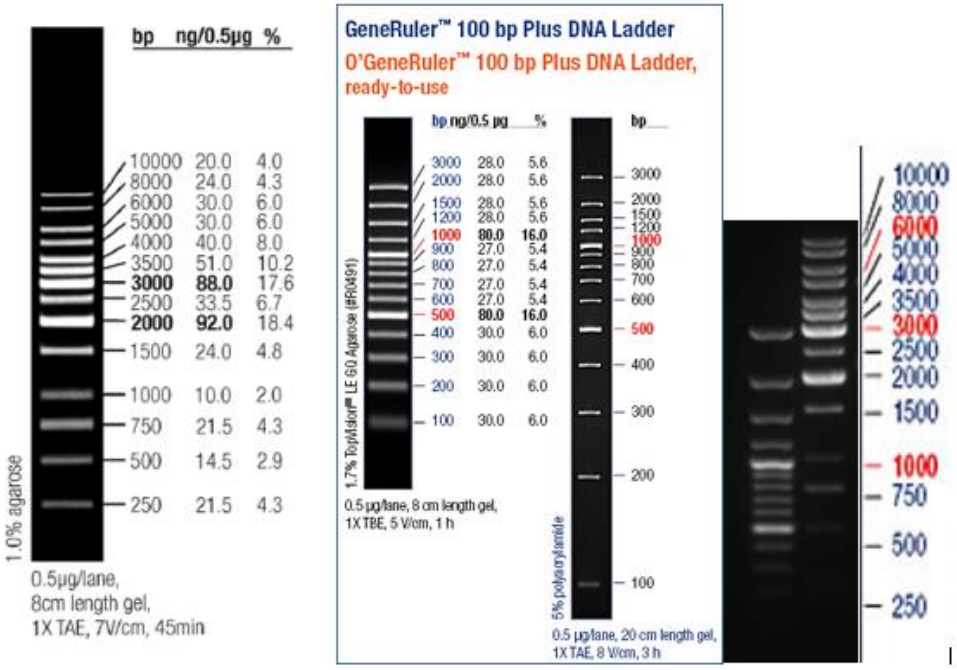
Agarose Gel electrophoresis

1. For a big gel, melt 0.8g agarose in 80mL 1X Tris-acetate EDTA buffer for a 1% gel. Add 5-6ul of SYBR Safe Red DNA stain and swirl to mix. (For small gel, 0.5g agarose in 50mL TAE buffer/3ul SYBR Safe Red DNA stain)
2. Ensure gel tray is not lopsided and cast the gel. Cover gel tray to prevent inactivation with light
3. Load 3ul of each ladder into the gel with reference to the DNA ladder chart. Each well can hold maximum 25ul of DNA+appropriate volume of 6X Loading dye.



A: 1 kb DNA Ladder **B: 100 bp DNA ladder** **C: 100bp 1 kb**

Figure 1. A: Ladder profile and sizes of Fermentas 1kB DNA ladder (SM0311). **B:** Ladder profile and sizes of Thermoscientific GeneRuler 100 bp DNA Ladder Plus (SM0243, SM0323). **C:** Image of a 1.2 % gel after electrophoresis showing the typical appearance of the 100 bp Thermoscientific DNA Plus and 1 kb Fermentas DNA ladders.