EcoRI  “Eco R One”

A restriction enzyme first isolated from E. coli strain RY13.

- **E**: First letter of the genus, Escherichia.
- **CO**: First two letters of the species, coli.
- **R**: The particular strain E. coli, RY13.
- **I**: Roman numeral. Indicates it was the first enzyme isolated from E. coli RY13.
Example: HindIII

Palindrome restriction site

Cuts occur between the AA

Resulting fragments have “sticky ends”
In this lab you will run **uncut DNA** along with DNA that has been pre-cut with **EcoRI**, **HindIII**, and **BamHI**.

In addition, **you will perform a digest** using one of the three restriction enzymes. You will make two digests, one to run yourself and one to trade with another group.

After running the DNA through the gel you should be able to **match your digest** with the pre-cut DNA to **confirm your results**.

You should also be able to **determine** which restriction enzyme the other group used in their digest.
Making a SYBR Gel

After microwaving your agarose gel...

1. Calculate how much 10,000X SYBRsafe dye you will need to make a 1X SYBRsafe gel.

   1 µl SYBRsafe for every 10 ml of agarose gel

2. Add SYBRsafe to your bottle of hot agarose. Swirl to mix.