334 MBIO
Lab 5 assignment (Primer designing)

- Lab 5 -

By: Aljawharah Alabbad

2025

- **Internalin A (InlA)** is a key virulence factor in *Listeria monocytogenes*, enabling bacterial invasion of host cells by specifically binding to **E-cadherin**, a crucial cell adhesion molecule. This interaction facilitates bacterial entry into intestinal epithelial cells, playing a significant role in *Listeria* pathogenesis and foodborne infections.
- **You aim to study a part of the protein that is relevant to your study by performing PCR.**
- **Follow the guidelines explained in the lab, and knowing that:**

1. The **PDB code** for **InlA** is **1O6V**.
2. Use ***E. coli K12*** as the **codon table parameter** for **EMBOSS Backtranseq**.
3. Design primers using **SnapGene** targeting the sequence between **BstXI and PsiI** for **PCR**.
4. Perform a virtual PCR, then analyse the predicted product size using **agarose gel simulation**.

If you need a refresher on using SnapGene for this assignment, watch the tutorial linked below.

Click Here