

## Bioman Kit – Student Prior Knowledge Required

### Biomanufacturing Kit

#### Knowledge/Skills Students Should Have Prior to Using the Kit

1. Students should have a basic understanding of the aspects of recombinant DNA technology that comprise part of the foundation for biomanufacturing. Specifically:
  - a. Knowledge about DNA
    - i. Basic structure of DNA
    - ii. The processes of transcription and translation
  - b. Understanding of the central dogma: DNA to RNA to Protein
  - c. Use of plasmids to deliver DNA into bacterial cells
  - d. Bacterial transformation
  - e. Use of bacteria as 'factories' to produce a specific protein of interest
2. Students should know how to properly use a micropipette and have some experience with micropipetting.