**DNA EXTRACTION PROTOCOL**

Ep1 - Sterilize the work station

EP2 - Assemble the Materials needed and bacteria culture

Ep4 - Transfer 600 µl of extraction buffer into an Eppendorf tube

Ep5 - Into an Eppendorf tube, scoop some colonies of bacteria cell into extraction buffer of pH 8.

EP6 - Vortex the mixture using a vortex mixer for 1 minute

Ep7 - Add 50 µl of 1% **SDS** solution to the mixture

Ep 7b Vortex and Leave it at room temperature for five minutes

EP 8 – Add 200 µl of Potassium acetate to precipitate the detergent and the cell debris out of the solution.

Ep 9 - Centrifuge the mixture at 10,000 rpm for 10 minutes, to separate the precipitate from the solution.

Ep 10 - Collect the supernatant containing the DNA into a new Eppendorf tube.

Ep 11 – Add 3 µl of RNase to the solution in the new Eppendorf tube

Ep 11b - Incubate at 370C for 30 minutes. This is to digest the RNA present in the solution.

Ep 12 - Then add Ice cold ethanol

Ep 12b - Incubate at -400C for 30 minutes. This is to precipitate the DNA out of the solution.

Ep 13 - The Eppendorf tube is centrifuge at 10,000 rpm for ten minutes. This makes the DNA precipitate to attach to the bottom of the Eppendorf tube.

Ep 14 - The supernatant is gently decanted leaving the DNA pellet.

Ep 15 – Wash the DNA pellet using 70% ethanol

Ep 15b - Centrifuge for 10 minutes. Decant the supernatant gently and leave the DNA pellet to dry at room temperature.

Ep 16 – Elute the dry DNA pellet using low salt or molecular grade DNase free water.

Note: The quality of the DNA is checked using agarose gel electrophoresis technique.