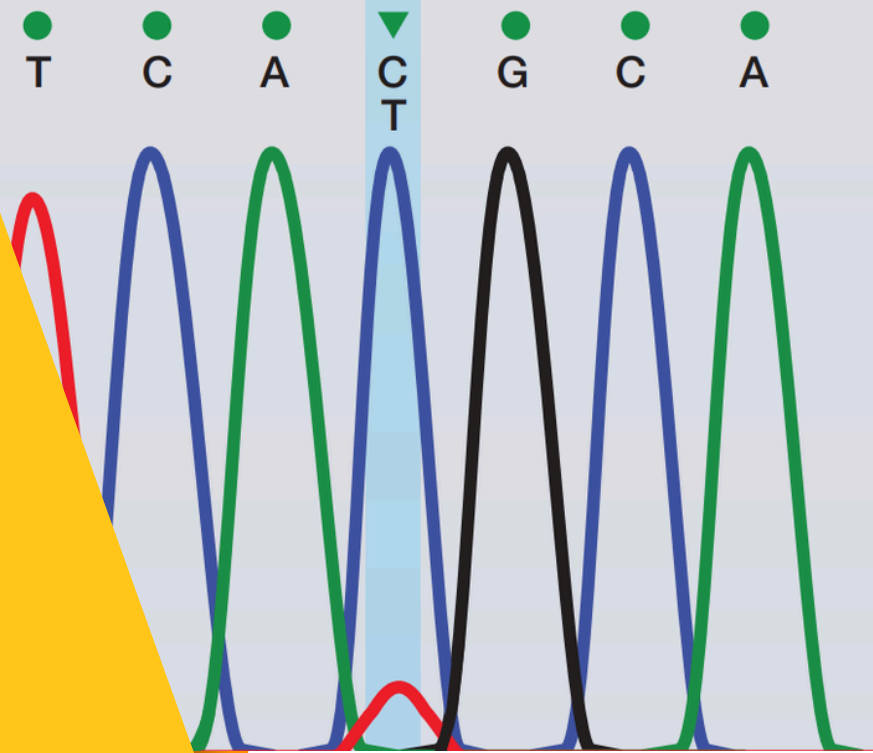


# MICROBIAL IDENTIFICATION BASED ON SANGER SEQUENCING



Sanger sequencing is a fast and cost effective technique for sequencing of small target specific regions of the genome. It is widely used as a gold standard technique for identification of the pure microbial isolates (e.g., bacterial and fungal strains by sequencing the 16S rRNA and ITS gene, respectively) at species levels with 99.99 % accuracy.

## Project workflow



### DNA extraction

- From Microorganisms
- DNA quantification
- QC analysis



### PCR Amplification

- Veriti™ Thermal Cycler
- QC analysis, PCR clean up



### Sanger Sequencing

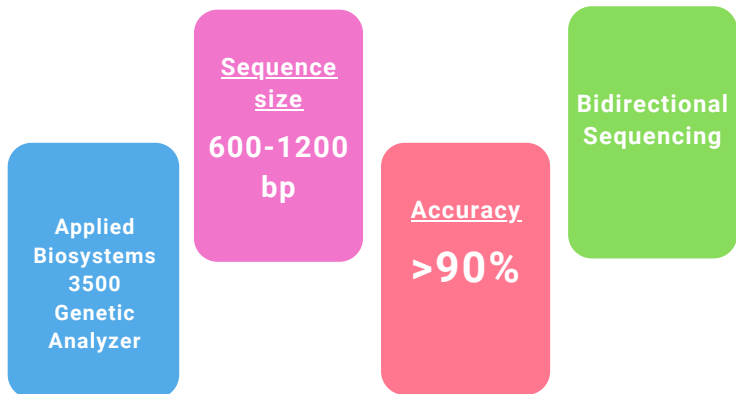
- Cycle sequencing and purification
- Capillary Electrophoresis



### Bioinformatic analysis

- Base calling
- Contig preparation
- NCBI BLAST
- Phylogenetic Tree
- Distance Matrix

## Sequencing parameters



## Key information

- Sample type: Pure microbial plate culture
- Method: Sanger sequencing
- TAT: 07 days

