

Q:- Explain the process of Introducing gene into bacteria?

(Ans):- Process of Introducing gene into bacterium:-
The process of gene Introduction into the bacterium is as under.

1st step:-

Identification and isolation of gene (gene of interest) from donor organism.

2nd step:-

An enzyme called restriction enzyme is used to cut the gene from the DNA of donor organism.

3rd step:-

The isolated gene is then attached with plasmid DNA of a bacterium.
=> The attached gene and plasmid DNA are collectively called recombinant DNA.

4th step:-

The recombinant DNA is then inserted into a bacterium.
=> The bacterium start dividing and produce a bacterial colony.
> Each bacteria of the colony contain the desired gene.
> Hence they produce the desired protein.