

TYPES OF MUTATION

ON THE BASIS OF HEREDITARY CHANGES IN THE GENOME

1. Chromosomal mutation:- Such mutation occur due to changes in chromosome number or structure.
2. Point or Gene mutation:- Such mutation involve changes in the sequence of the DNA of a gene

ON THE BASIS OF NATURE OF MUTATION OR ITS ORIGIN

1. Spontaneous mutation:- Such mutations occur spontaneously in nature.
2. Induced mutation:- These mutation are induced artificially through chemical or physical mutagens.

ON THE BASIS OF TYPE OF CELLS AFFECTED BY MUTATION

1. **Germinal mutation:-** These mutation occur in generative cells either in gametes or gamete producing cells.
2. **Somatic mutation:-** Such mutation occur in somatic cells and produce localised phenotypic changes in the body.

ON THE BASIS OF DIRECTION OF MUTATION

1. Forward mutation:- Such mutations give rise to mutant alleles from wild type alleles.
2. Reverse or Backward mutation:- These mutations occur in mutant alleles and give rise to wild type alleles.