

4th Jan 2024

⊗ DNA pair which is GC rich will require more energy to denature than AT rich

A form → Rare, possibly only in test tube

Z form → Evidence that it is found in areas where recombination happening.

The denaturation temp of DNA depends on —

① Length of DNA

② GC content.

If the DNA length is short — denaturation is easily accurate

If it is long, denaturation may not be accurate

Double stranded DNA absorbs less UV than single stranded, as the base pairs face in and their exposure to light is minimal.

It was found that the avg min of protein length was 30 amino acids, so the avg min of protein encoding genes is about 100 base pairs — this was used to theoretically predict the number of protein coding genes in the genome.

This was experimentally verified by taking adult and fetal human tissues and counting the proteins — but this is an undercounting as some proteins may be non-detectable or not present in the normal samples taken.

So the actual no. of proteins is between the exp value and the predicted no.