

7. The red line indicates the location of the gene on chromosome 11.

8. The order of the genes is: 5'-epsilon -- gamma-G -- gamma-A -- delta -- beta--3'.

9. Yes.

10. **mRNA Secondary Structure of 3' and 5' UTRs**

**11. 5' UTR is 50 bases while the 3' UTR is 132 bases.**

14. There are three exons and two introns.

15. First two bases are GU

16. The last two bases are AG.

17. More introns.

18. Synonymous SNP are colored green.

19. Non-synonymous SNPs are colored red.

20. Its non-synonymous because it is colored red.

21. Its in an exon.

22. Its at the beginning.

23.