

Started on	Saturday, 28 October 2023, 8:04 PM
State	Finished
Completed on	Sunday, 29 October 2023, 9:14 PM
Time taken	1 day 2 hours
Marks	9.00/9.00
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 9.00 out of 9.00

1 What is the **Entrez Gene ID** of *BRCA1* in the human genome?

- ☒ 672 ✓
- ☐ ENSG00000012048
- ☐ NC_000017.11
- ☐ Blank answer

Mark 1.00 out of 1.00

The correct answer is: 672

2 Where is this gene located? Chromosome ✓ (answer with either a number, X, or Y, only), on the

✓ strand.

3 How many transcripts does *BRCA1* encode according to Ensembl?

- ☐ 1 transcript
- ☐ <5 transcripts
- ☒ >5 transcripts ✓
- ☐ Blank answer

Mark 1.00 out of 1.00

The correct answer is: >5 transcripts

4 Which are the closest **protein-coding genes** to *BRCA1* according to Ensembl? ✓ downstream

(closest to its 3' end) and ✓ upstream (closest to its 5' end) (answer with the corresponding gene symbols).

5 Is *BRCA1* involved in any known phenotype?

- ☐ Skin color
- ☐ Parkinson
- ☒ Various types of cancer ✓
- ☐ Blank answer

Mark 1.00 out of 1.00

The correct answer is: Various types of cancer

6 Browse the Variant table and find SNP rs1800704. Which is the most abundant allele?

- ☒ C ✓
- ☐ T
- ☐ It depends on the population
- ☐ Blank answer

Mark 1.00 out of 1.00

The correct answer is: C

7 What is the main objective of the 1000 Genomes Project?

- ☐ To characterize human genes
- ☒ To study human genetic diversity in diverse populations ✓
- ☐ To compare dozens of sequenced mammalian genomes
- ☐ Blank answer

Mark 1.00 out of 1.00

The correct answer is: To study human genetic diversity in diverse populations