

The following questions relate to the structure given in the accompanying 3D model. (Note: the model is shown in blue. Some loops are shown in red.)

1. In the Model 1, what is the name of the amino acid at the position 10? \_\_\_\_\_

2. In the Model 1, what is the name of the amino acid at the position 20? \_\_\_\_\_

3. The amino acid at position 10 is a hydrophobic amino acid. What is the name of the amino acid at position 20? Is it a hydrophobic amino acid? Explain why. (Remember: hydrophobic amino acids are those that have a non-polar side chain.)

4. What is the name of the amino acid at position 30? Is it a hydrophobic amino acid? Explain why.

5. What is the name of the amino acid at position 40? Is it a hydrophobic amino acid? Explain why. (Remember: hydrophobic amino acids are those that have a non-polar side chain.)

6. What is the name of the amino acid at position 50? Is it a hydrophobic amino acid? Explain why. (Remember: hydrophobic amino acids are those that have a non-polar side chain.)

7. What is the name of the amino acid at position 60? Is it a hydrophobic amino acid? Explain why. (Remember: hydrophobic amino acids are those that have a non-polar side chain.)

8. The hydrophobic amino acid at position 10 is a hydrophobic amino acid. What is the name of the amino acid at position 20? Is it a hydrophobic amino acid? Explain why.

9. What is the name of the amino acid at position 30? Is it a hydrophobic amino acid? Explain why.

10. What is the name of the amino acid at position 40? Is it a hydrophobic amino acid? Explain why.

11. Hydrophobic amino acids are those that have a non-polar side chain. What is the name of the amino acid at position 50? Is it a hydrophobic amino acid? Explain why. (Remember: hydrophobic amino acids are those that have a non-polar side chain.)

12. What is the name of the amino acid at position 60? Is it a hydrophobic amino acid? Explain why.