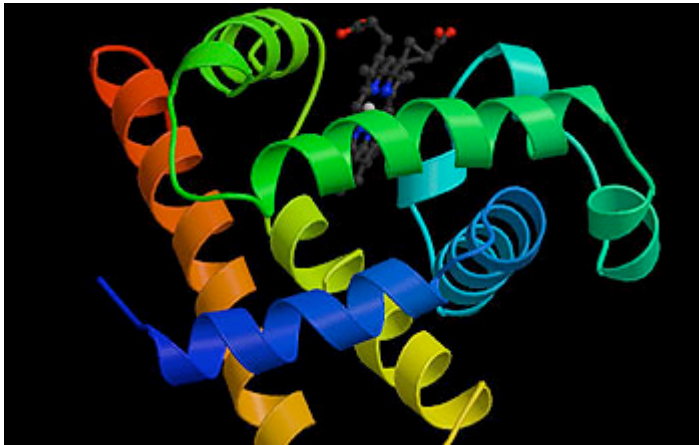


Myoglobin Protein Structure

Name _____

Cn3D



Background

Proteins are made up of amino acids. Myoglobin proteins are used to store oxygen in our mussel tissue.

Our objective today is to view myoglobin protein structures on the NCBI website and figure out at least three amino acids that make up any portion of the protein.

Procedure

1. Google NCBI. Click on the NCBI Home page site.
2. Under "Search" click on the down arrow and pick Structure.
3. Under for: write in myoglobin
4. Click "go."
5. When you have the page with a list of all the myoglobin structures on it, choose any one of the 350 proteins listed. If you get a window that says "file open" choose open. You should get a screen that looks like this:
6. At the top of this screen you will see a tool bar at the top which includes: File, View, Show/Hide, Style, Window. Choose Style
 Edit global style
 Take the check mark off of the box for helix box and strand box.
 - a. Click done
7. View the protein structure.
8. Take the arrow and click on the picture then move it around



Describe what happens when you do this.

9. Highlight a sequence of the letters on the bottom of the page in the "Sequence Alignment Viewer"

Describe what happens when you highlight a sequence of letters?

10. What do these letters represent?

11. Write the full name of the first three amino acids in the sequence?

12. Go back to "Styles" in the tool bar and choose "Rendering Shortcuts. Pick one of the styles listed other than "worms" viewed and draw it in the space provided below.

Write which protein you chose

Draw your protein in the space provided below.