globin.

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MYOGLOBIN :-

Myoglobin is also combination of two words i.e. Myo and globin. Myo means muscles and globin means type of protein.

Myoglobin is a relatively small ox binding protein of muscle cells that form is the storage and transport of oxygen fo mitochondrial oxidation of cell-nutrients. It h the distinection of being the first globula protein to have its 3-D structure elucida by X-ray diffraction studies. This way co lished by John Kendrew and his colleag in the 1950s. Myoglobin contains a single polypeptide chain of 153 amino acid r ces and a single iron prophyrin or hem gr identical to that of hemoglobin. The heme is responsible for the deep brown re

Colour of both myoglobin and hemoglobin. Myoglobin is particularly abundant the muscle of diving mammals such as the whole, seal and tortoise. Whose muscles are so rich in this protein that they are pink. The function of myoglobin is to bind oxygen in the muscles and to enhance its transport to the mitochondria which consume oxygen during respiration.

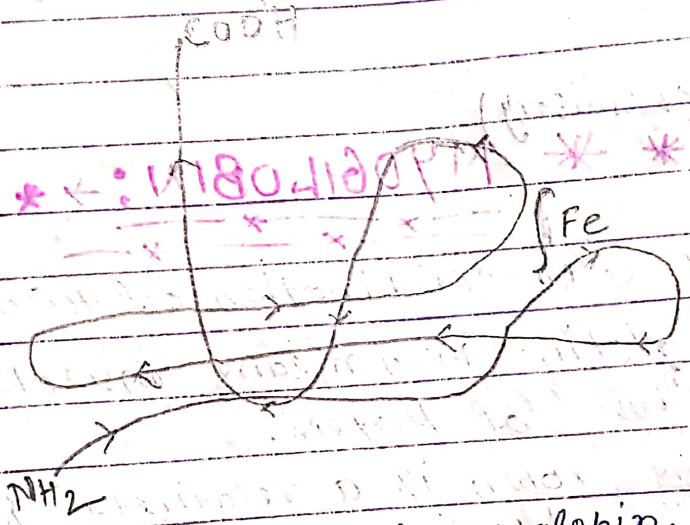

Fig → Str. of myoglobin.

Myoglobin has molecular wt. of 16,700. It is an extremely compact macromolecule with oblate, spheroid shape and leaves little empty space in its interior.

Other important features of the myoglobin are listed below:→

(i) The molecule is very compact and leaves so little space in its interior as to accomodate only as water molecule.