**Human serum transferrin (hTF) systems**

- hTF is a ferric binding protein that transports iron from sites of absorption to virtually all cells.
- hTF prevents pathogens from accessing the host iron pool. Accordingly, hTF that is highly conserved across organisms is a potential target for therapeutics.
- It possesses the chain folded into two globular lobes, termed the N- and C-lobes, connected by a short peptide linker with a high degree of similarity (36%) and identity (40%).
- hTF displays three different crystal structures: Closed form which is iron bounded (holo), open form which is iron free (apo) and partially open (PO) form which exhibits an open N-lobe but a closed C-lobe but is fully iron loaded in both lobes.

**References:**