Haptoglobin

Haptoglobin (HP) is a major acute phase protein in cows, goats, mice, pigs, rabbits, and sheep. It is a moderate acute phase protein in cats, dogs, horses, humans, and rats. It is known in many cases to be post acute marker of the inflammatory process. Whereas CRP and SAA increase rapidly very early after inflammatory stimuli, HP increases a few days later to note the extended inflammatory period. In some cases, it has been demonstrated to indicate a chronic inflammatory process. Some investigators have proposed it to be an excellent complement to CRP and SAA testing and that it should form part of an inflammatory index that could be used to monitor patients.

HP binds free hemoglobin which aids in reducing oxidative damage. It has bacteriostatic and immunomodulatory effects.

HP has been observed to increase with the following events:

- Increase with viral infection in cows (Saini, et al. AJVR 59:1101-1107, 1998)
- Increase with bacterial infection in sheep (Skinner, Vet Rec 30:2-7, 2001)
- Increase with stress due to bleeding and handling protocols in pigs (Salamano, et al. Vet J 177:100-115, 2008)