

Neutrophil Myeloperoxidase (MPO) :

The MPO is a specific enzyme released by activated neutrophil in the extracellular medium. MPO uses H₂O₂ to produce HOCL probably the most potent oxydant generated in vivo. Thus, MPO are able to nitrate or chlorinate many biological compounds (1)

Our group demonstrated the importance of MPO in several inflammatory diseases such as colics, laminitis, sepsis, arthritis, inflammatory airway disease and recurrent airway obstruction (2-8)

This enzyme is also present in the semen and could interfere with the fertility and the freezability (9,10).

In sport medicine, a systemic activation of neutrophils occurred after strenuous exercise such as a cross country or an endurance race (11-12). This sudden increase of MPO was correlated to a decrease of mitochondrial function (13).

More recently, It was shown that MPO enters in the cells and could alter the mitochondrial function (14).

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