The AMADEOX Concept

The AMADEOX concept is a set of several methods designed for the measurement of antioxidant, anti-lipoperoxidant and anti-inflammatory activities of molecules or natural extracts on cellular and/or cell-free systems.

- Colorimetric ABTS and DPPH assays
 - → Global evaluation of the antiradical and antioxidant activity
- Electron Paramagnetic Resonance (EPR)
 - → For a direct evaluation of Reactive Oxygen Species (ROS) generation by a cell free system using adequate spin trap or by several cells models (neutrophils, monocytes or cultured cell lines)
- Chemiluminescence, fluorescence and Gas Chromatography
 - → For the evaluation of the anti-lipoperoxidant activity
- Specific immuno extraction followed by enzymatic detection (SIEFED) and ELISA of the main enzymes responsible for the ROS generation: NADPH Oxidase, Myeloperoxidase
 - → For the evaluation of the anti-catalytic activity of molecules or extracts



Electron paramagnetic resonance (EPR, Micro-EMX) for free radicals detection

(Spin trapping, spin labeling or direct EPR analyses)