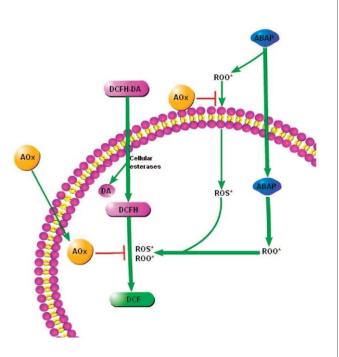


Cellular Antioxidant Activity CAA



Objective

During aging of the skin, many oxidative stresses occur. Limit the damage of such stresses is one goal of cosmetics. Many natural antioxidants are able to neutralize free radicals that form, limiting cutaneous inflammation.



Cellular Antioxidant Activity test (CAA) (Wolfe et al. 2007)

Method

The CAA test (Cellular Antioxidant Activity), very close to the ORAC test, evaluates the antioxidant properties of plant extracts on a cell model. Initially described using hepatocytes, the CAA test was set up to measure the antioxidant properties of the actual supply of fruits and vegetables.

Polyphenols Biotech adapted this method using human fibroblasts (Normal Human Dermal Fibroblasts NHDF) to approximate physiological conditions of the skin.

This test can be adapted to different cell lines.

Application

Produced under physiological conditions, this test assesses the actual cellular antioxidant capacity of a plant extract (pH, membrane permeability, intracellular antioxidant systems).

Other tests available: ORAC, DPPH, TEAC, FRAP

