



METADATA

Title: Free radicals and oxidative stress

Other Titles: Chemistry - Biology - Medicine

Language: Greek

ISBN: 978-960-603-417-6

Subject: MEDICINE AND HEALTH SCIENCES, LIFE SCIENCES, BIOLOGICAL SCIENCES

Keywords: Free Radicals / Oxidative Stress / Reactive Oxygen Species (ros) / Antioxidants / Oxidation Of Cellular Components

Bibliographic Reference: Galaris, D. (2015). Free radicals and oxidative stress [Undergraduate textbook]. Kallipos, Open Academic Editions. <http://dx.doi.org/10.57713/kallipos-524>

Abstract

A'. The first part of the book provides an extensive introduction to the basic concepts of the terms "free radicals", "reactive oxygen species" and "oxidative stress". In separate chapters the following topics are developed: 1. Biochemical mechanisms of free radical formation in cells. 2. Effects of the formation of "Active Forms of Oxygen" in cells. 3. Defence mechanisms.

B'. The second part of the book describes the physiological actions of 'Reactive Oxygen Forms', with the following individual chapters: 1. "Active Oxygen Forms" and intracellular signal transduction. 2. 'Reactive oxygen species' and transcription factor activation; 3. 'Reactive oxygen species' and cell proliferation. 4. 'Active oxygen species', apoptosis and autophagy.

