

Book Review

Free Radicals. A practical approach

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There are four parts to this compact book. Part 1 deals with physico-chemical methods of free radical detection, such as esr, nmr, and pulse radiolysis. These sections are well covered in depth by internationally recognised experts in their respective fields. Part 2 is described as the biochemical section for detecting free radicals, and its contents include, chemiluminescence, digital microfluorography, and aromatic hydroxylation. Section headings are essential but they are often difficult to define. We see this in Part 2 since none of the biochemical methods directly detects or measures free radicals. Part 3 is concerned with the measurement of free radical products such as lipid peroxides, TBA-reactive materials, 4-hydroxyl-2-nonenal, F_2 -isoprostanes, protein carbonyls and hydroperoxides, and carbohydrate

and DNA oxidation products. The last section is devoted to the measurement of antioxidants with chapters on glutathione, glutathione peroxidase, superoxide dismutase, vitamin E, vitamin C, and techniques used in gene expression.

Prefacing Parts 1-4 are brief and useful introductions to all the topics covered. Minor typographical errors such as 'nitrous oxide (NO) and some minor changes in nomenclature for describing free radicals do not detract from its usefulness. The uniform presentation of method protocols is very pleasing and easy to follow, and numerous high quality figures make the book interesting and informative throughout. Free radicals: a practical approach, makes a valuable contribution to the field and comes highly recommended to all researchers.

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