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(publicacions dels anys 1984-1985)

Societat Catalana de BIOLOGIA

L'edició 2010 del Premi Ramon Turró va ser atorgada al Dr. **Carlos López-García**, de la Universitat de València, com a autor principal de l'article

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A new stabilizing agent for the tetramethyl benzidine (TMB) reaction product in the histochemical detection of horseradish peroxidase (HRP)

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In this paper, an alternative procedure for the histochemical detection of HRP using amonium heptamolybdate (AHM) as a stabilizing agent and tetramethyl benzidine (TMB) as a chromogen is reported. This procedure avoids the two main problems that occur in previous methods using sodium nitroferricyanide (SNF) as the stabilizer, namely, the appearance of needle-shaped crystals at non-specific anatomical sites, and intensive tissue shrinkage. A comparative study of both, the TMB–AHM and TMB-SNF methods, was performed in the analysis of cerebral cortex afferent connections of the lizard *Podarcis hispanica*. This study demonstrates that the two methods are of similar sensitivity. The TMB–AHM reaction can be carried out at physiological pH (from 6 to 8), thus, avoiding tissue contraction. The reaction product is of an intense blue-green colour and, as with the TMB–SNF method, shows granulation. The appearance of non-specific precipitates is completely avoided when the incubation medium is maintained at a pH in excess of 5.

Introduction

One of the most extensively used techniques in the tracing of neural connections is the injection of horseradish peroxidase (HRP). Since its discovery (Kristensson and Olsson, 1971; La Vail and La Vail, 1974) a large number of neurohistochemical techniques, using different chromogens and/or experimental procedures, have been developed in order to increase the sensitivity: diaminobenzidine (DAB) (La Vail and La Vail, 1974; Streit and Reubi, 1977; Adams, 1977); DAB-glucose oxidase (DAB-GOD) (Itoh et al., 1979), O-DIA (De Olmos, 1977); benzidine dihydrochloride

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Artigas F, Sarrias MJ, Martinez E, Gelpi E (1985) Serotonin in body fluids. Characterization of human plasmatic and cerebrospinal fluid pools by means of a new HPLC method Life Sciences 37; 441-447 Institut de Química Bioorgànica, CSIC	**89 cites**
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El Dr. Carlos López-García, de la Universitat de València, rep el 1r Premi Ramon Turró de mans del Sr. Sergio Dantí, net de Ramon Turró.

El Dr. Carlos López-García, de la Universitat de València, imparteix la conferència d'acceptació del 1r Premi Ramon Turró.

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