

Author's Accepted Manuscript

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PII: S0956-5663(18)30393-2
DOI: <https://doi.org/10.1016/j.bios.2018.05.040>
Reference: BIOS10498

To appear in: *Biosensors and Bioelectronic*

Received date: 21 February 2018
Revised date: 22 May 2018
Accepted date: 23 May 2018

Cite this article as: Murugesan Balamurugan, Paulraj Santharaman, Thangamuthu Madasamy, Seenivasan Rajesh, Niroj Kumar Sethy, Kalpana Bhargava, Srigiridhar Kotamraju and Chandran Karunakaran, Recent trends in electrochemical biosensors of superoxide dismutases, *Biosensors and Bioelectronic*, <https://doi.org/10.1016/j.bios.2018.05.040>

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Recent trends in electrochemical biosensors of superoxide dismutases

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Abstract

Superoxide dismutases (SODs), a family of ubiquitous enzymes, provide essential protection to biological systems against uncontrolled reactions with oxygen- and nitrogen- based radical species. We review first the role of SODs in oxidative stress and the other biological functions such as peroxidase, nitrite oxidase, thiol oxidase activities *etc.*, implicating its role in neurodegenerative, cardiovascular diseases, and ageing. Also, this review focuses on the development of electrochemical label-free immunosensor for SOD1 and the recent advances in biosensing assay methods based on their catalytic and biological functions with various

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