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PII: S0300-483X(17)30202-0
DOI: http://dx.doi.org/doi:10.1016/j.tox.2017.07.013
Reference: TOX 51919

To appear in: *Toxicology*

Received date: 20-4-2017
Revised date: 22-6-2017
Accepted date: 21-7-2017

Please cite this article as: Blajszczak, Chuck, Bonini, Marcelo G., Mitochondria targeting by environmental stressors: implications for redox cellular signaling.Toxicology http://dx.doi.org/10.1016/j.tox.2017.07.013

Mitochondria targeting by environmental stressors: implications for redox cellular signaling

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ABSTRACT

Mitochondria are cellular powerhouses as well as metabolic and signaling hubs regulating diverse cellular functions, from basic physiology to phenotypic fate determination. It is widely accepted that reactive oxygen species (ROS) generated in mitochondria participate in the regulation of cellular signaling, and that some mitochondria chronically operate at a high ROS baseline. However, it is not completely understood how mitochondria adapt to persistently high ROS states and to environmental stressors that disturb the redox balance. Here we will review