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The Nrf2 Pathway: Regulation, Functions, and Potential Applications

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Deadline for manuscript submissions:
closed (31 December 2019)

Message from the Guest Editors

The Nrf2 pathway, a master regulator of redox homeostasis discovered in the mid 1990s, is an integrated cellular response for electrophiles and thiol reactive compounds. In addition to its activation by environmental electrophiles such as quinones, diverse mechanisms of Nrf2 activation have been reported. The Nrf2 pathway has a wide variety of functions, such as defense against oxidative stress and electrophilic toxicity, carcinogenesis protection, tumorigenesis, anti-inflammation, stem cells regulation, anti-aging, reducing mechanical stress and organelle stress (autophagy, endoplasmic reticulum, mitochondria), protection against brain and skin injuries, and so forth. At present, drug discovery targeting the Nrf2 pathway has been explored extensively.

In this Special Issue, we widely recruit original articles that describe new discoveries in the Nrf2 pathway in any relevant topics, such as physiological functions, gene regulation, activation mechanism, drug discovery, evolution, human diseases, protein structure, and genome. We also welcome review articles and commentaries.

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Message from the Editor-in-Chief

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