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The Roles of CaMKK2 in Cell Metabolism and Disease 2022

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Message from the Guest Editors

The calcium-sensing enzyme Ca^{2+} /calmodulin-dependent protein kinase kinase 2 (CaMKK2) functions as a molecular hub to regulate critical cell functions and physiological responses. CaMKK2's well-characterised substrates CaMK1, CaMK4, and the metabolic co-ordinator AMP-activated protein kinase (AMPK) implicate CaMKK2 signalling cascades in diverse processes including energy homeostasis, autophagy, cell survival, cell cycle, cytoskeletal remodelling, inflammation, gene expression, mRNA splicing, neuronal excitability, cognition and synaptic plasticity associated with learning and memory. CaMKK2 also directly activates the important oncogenic target AKT (PKB).

In this Special Issue, we aim to capture the scope of ongoing research being conducted on CaMKK2 at the molecular, cellular and physiological levels. We are particularly interested in submissions investigating how CaMKK2 dysregulation leads to a wide range of pathologies and psychiatric disorders. Our goal is to amalgamate recent advances in this exciting and emerging field, and to provide a platform for united commentary on the current state of play regarding the therapeutic potential of CaMKK2.

Deadline for manuscript submissions:

closed (30 September 2022)



mdpi.com/si/116950

Special Issue



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Message from the Editorial Board

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