



Molecular Mechanisms of Adaptation to Hypoxia 2.0

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This Special Issue of *IJMS* aims to invite papers reporting new knowledge on the understudied questions. These include but are not limited to the following: The mechanisms controlling and regulating the oxygen sensing of cells, their interactions, and their role in intracellular signaling in hypoxia; The molecular mechanisms contributing to the formation of urgent and long-term cellular and systemic adaptation to hypoxia; Variability of these processes depending on the characteristics of hypoxia (strength, duration, regime features); Search for the optimal conditions for the induction of hypoxic tolerance; Molecular approaches to elaborating the methods of anti-hypoxic protection which accelerate and facilitate the formation of urgent and long-term mechanisms of adaptation to oxygen deficiency.

Keywords: hypoxia\ischemia; hypoxic injury and tolerance; oxygen sensing;hypoxic signaling; hypoxia-inducible factors; HIF-1; mitochondria; succinate

