

Special Issue

The GPR81 Receptor: Lactate as Signaling Molecule in Health and Disease

Message from the Guest Editor

GPR81 is a seven-transmembrane G-protein-coupled receptor that acts as a lactate sensor. The binding of lactate to GPR81 triggers a signaling cascade that leads to a decrease in the second messenger cyclic AMP. It is well established that lactate has a pleiotropic role, functioning both as metabolite and as a signaling molecule under healthy and pathological conditions. Growing evidence indicates that lactate plays a crucial role in activating the signaling cascade mediated by GPR81, thereby influencing multiple cellular effects. This Special Issue aims to present recent advances in the lactate-induced GPR81 signaling cascade and to explore potential new strategies for GPR81 inhibition.

Guest Editor

Dr. Tania Fiaschi

Department of Experimental and Clinical Biomedical Sciences "M. Serio", University of Florence, 50134 Florence, Italy

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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