Special Issue

CDKL5 Deficiency Disorders: From Molecular Mechanisms to Therapeutics

Message from the Guest Editors

This Special Issue on “CDKL5 Deficiency Disorders: From Molecular Mechanisms to Therapeutics” aims to expand knowledge on the functions of CDKL5, the molecular mechanisms underlying CDD, and potential new therapeutic strategies for this severe disease. CDKL5 deficiency disorder (CDD) is a rare X-linked neurological pathology caused by mutations in CDKL5, which encodes a serine-threonine kinase highly expressed in the brain. CDD patients are characterized by drug-resistant epilepsy occurring within 3 months after birth, cognitive and motor dysfunctions, and autistic-type features. CDKL5 is implicated in many neuronal processes such as the regulation of excitation/inhibition balance, microtubule dynamics, and neuronal survival. Despite research efforts, there is no cure for CDD currently, and the urgent need for therapies requires a more detailed knowledge of the molecular network and targets regulated by CDKL5. In this Research Topic, we welcome original research and review articles aimed at increasing the knowledge on CDKL5 functions and novel therapeutic strategies for CDD.

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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