



CDKL5 Program of Excellence Pilot Grant Program

Application Title: Identification of CDKL5 direct substrates based on kinase assay linked phosphoproteomics

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Mutation of cyclin dependent kinase like 5 protein (CDKL5) has been linked to severe neurodevelopmental disorders such as early onset seizures and atypical Rett syndrome, and the identification of CDKL5 substrates is essential to understanding the mechanisms by which CDKL5 deficiency leads to the disorders. The goal of this proposal is to apply a state-of-the-art proteomic technology to identify and validate the direct substrates of CDKL5 and to provide the critical information to fight against the diseases.