

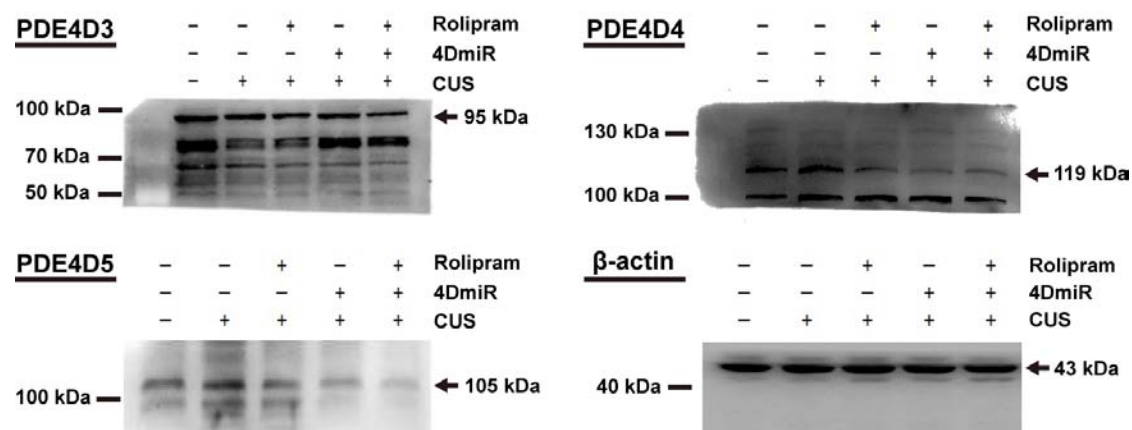
Phosphodiesterase-4D Knockdown in the Prefrontal Cortex Alleviates Chronic Unpredictable Stress-Induced Depressive-Like Behaviors and Memory Deficits in Mice

Zhen-Zhen Wang^{1,2}, Wei-Xing Yang^{1,3}, Yi Zhang⁴, Nan Zhao¹, You-Zhi Zhang¹,
Yan-Qin Liu¹, Ying Xu⁶, Steven P. Wilson⁵, James M. O'Donnell⁶, Han-Ting Zhang⁷
& Yun-Feng Li¹

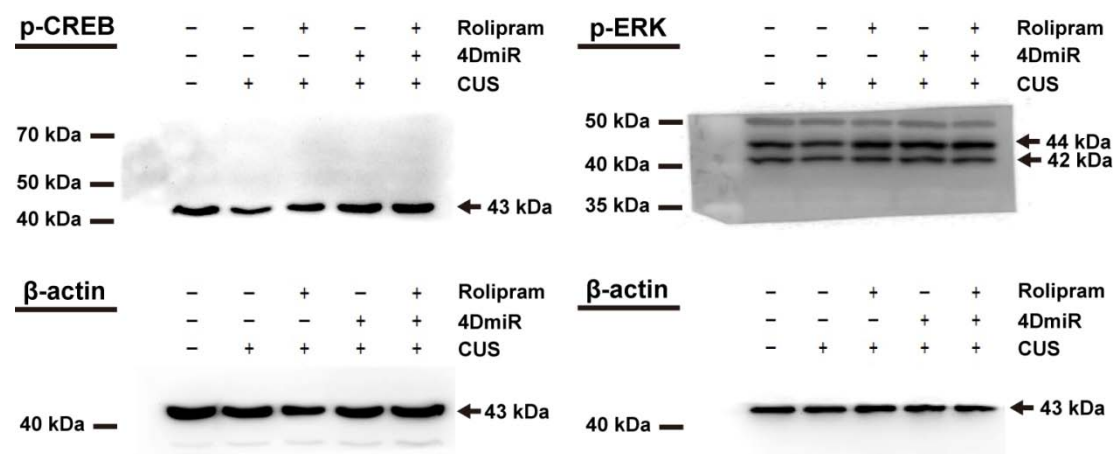
¹Department of New Drug Evaluation, Beijing Institute of Pharmacology and Toxicology, Beijing 100850, China, ²State Key Laboratory of Bioactive Substances and Functions of Natural Medicines, Institute of Materia Medica & Neuroscience Center, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing 100050, China, ³Department of Pharmacology, China Pharmaceutical University, Nanjing 210009, China, ⁴Department of Anatomy, School of Preclinical Medicine, Beijing University of Chinese Medicine, Beijing 100029, China, ⁵Department of Pharmacology, Physiology, and Neuroscience, University of South Carolina School of Medicine, Columbia, SC 29208, USA, ⁶School of Pharmacy & Pharmaceutical Sciences, The State University of New York at Buffalo, New York, NY 14260, USA, ⁷Departments of Behavioral Medicine & Psychiatry and Physiology & Pharmacology, West Virginia University Health Sciences Center, Morgantown, WV26506, USA

Correspondence and requests for materials should be addressed to Y. F. L. (lyf619@aliyun.com)

Supplementary Information



Supplementary Figure S1 | Representative blots of long-form PDE4D variants and β -actin in the prefrontal cortical tissues. The prefrontal cortical tissues of 3 mm in diameter around the injection site were punched out for western blot analysis. The black bars beside the images indicate the position of molecular size markers. The black arrowheads indicate the position of the target proteins shown in Fig. 1b in the main article. All gels were run under the same experimental conditions and blots were processed in parallel.



Supplementary Figure S2 | Representative blots of pCREB, pERK and β -actin in the prefrontal cortical tissues. The prefrontal cortical tissues of 3 mm in diameter around

the injection site were punched out for western blot analysis. The black bars beside the images indicate the position of molecular size markers. The black arrowheads indicate the position of the target proteins shown in Fig. 6c and d in the main article. All gels were run under the same experimental conditions and blots were processed in parallel.