

Exendin-4 improves long-term potentiation and neuronal dendritic growth in high-fat diet mice and neurons under metabolic imbalance conditions

Ming Wang¹⁺, Gwangho Yoon²⁺, Juhyun Song^{2*}, Jihoon Jo^{1,3,4*}

¹Department of Biomedical Sciences, BK21 PLUS Center for Creative Biomedical Scientists at Chonnam National University, Research Institute of Medical Sciences, Chonnam National University Medical School, Gwangju 501-757, Republic of Korea

²Department of Anatomy, Chonnam National University Medical School, Hwasun 58128, Jeollanam-do, Republic of Korea

³NeuroMedical Convergence Lab, Biomedical Research Institute, Chonnam National University Hospital, Jebong-ro, Gwangju 501-757, Republic of Korea

⁴Department of Neurology, Chonnam National University Medical School, Gwangju 501-757, Republic of Korea

⁺ These authors equally contributed to this study

***Correspondence to:**

Juhyun Song, Ph.D., Department of Anatomy, Chonnam National University Medical School, Hwasun 58128, Jeollanam-do, Republic of Korea, Tel: +82-61-379-2706; E-mail: juhyunsong@chonnam.ac.kr

Jihoon Jo, Ph.D., Department of Biomedical Sciences, Chonnam National University Medical School, 61469, 160, Baekseo-ro, Dong-gu, Gwangju, Republic of Korea, Tel: +82-(0)62-220-4419; E-mail:

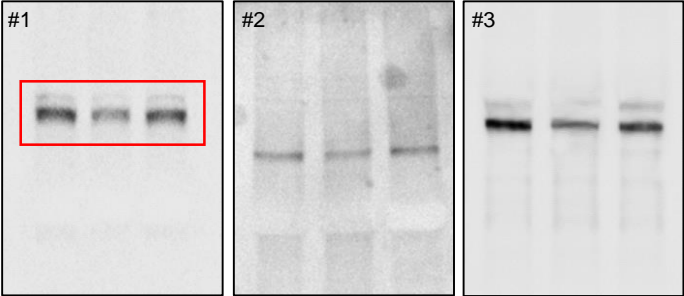
Jihoon.Jo@chonnam.ac.kr

Supplementary Information

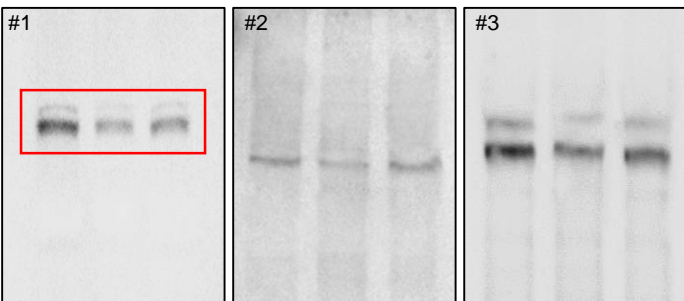
Full-length blots for **Figure 2d**

PSD-95, 95kDa

Hippocampal neuron

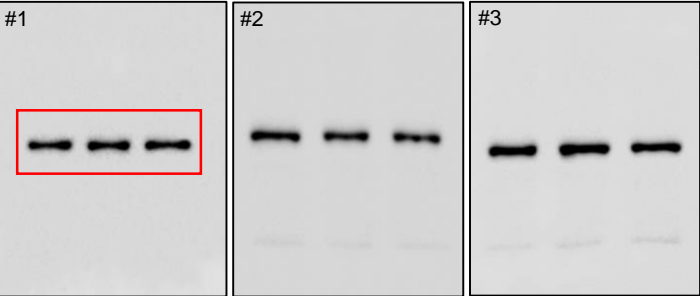


Cortical neuron

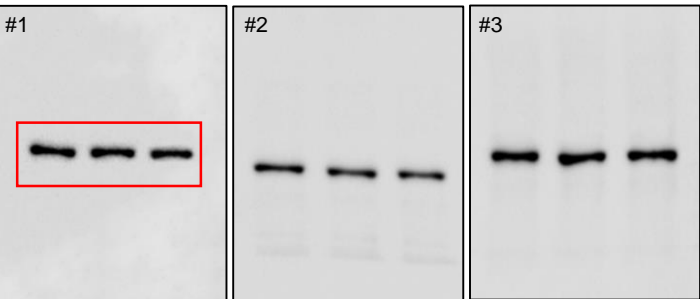


β -actin, 43kDa

Hippocampal neuron

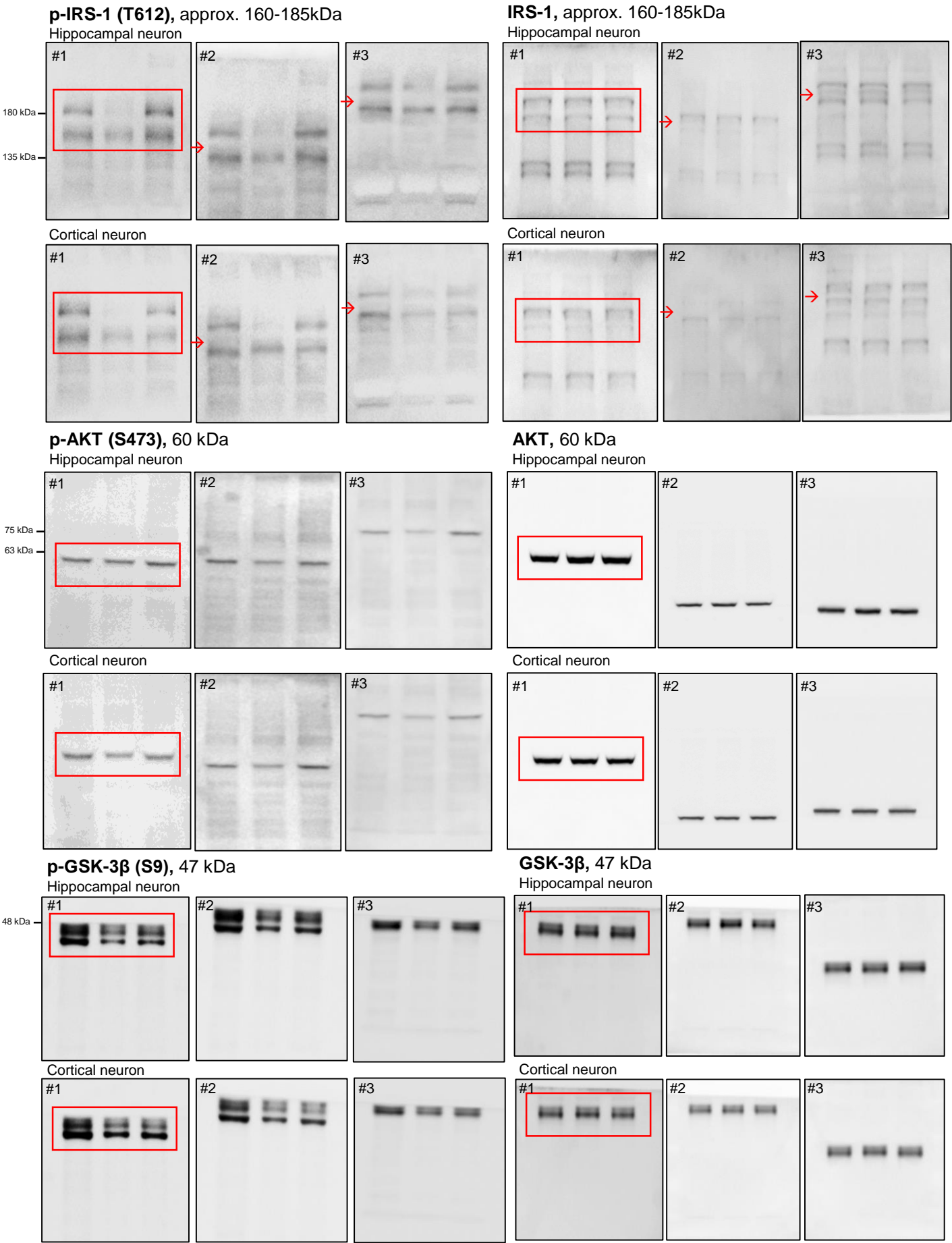


Cortical neuron



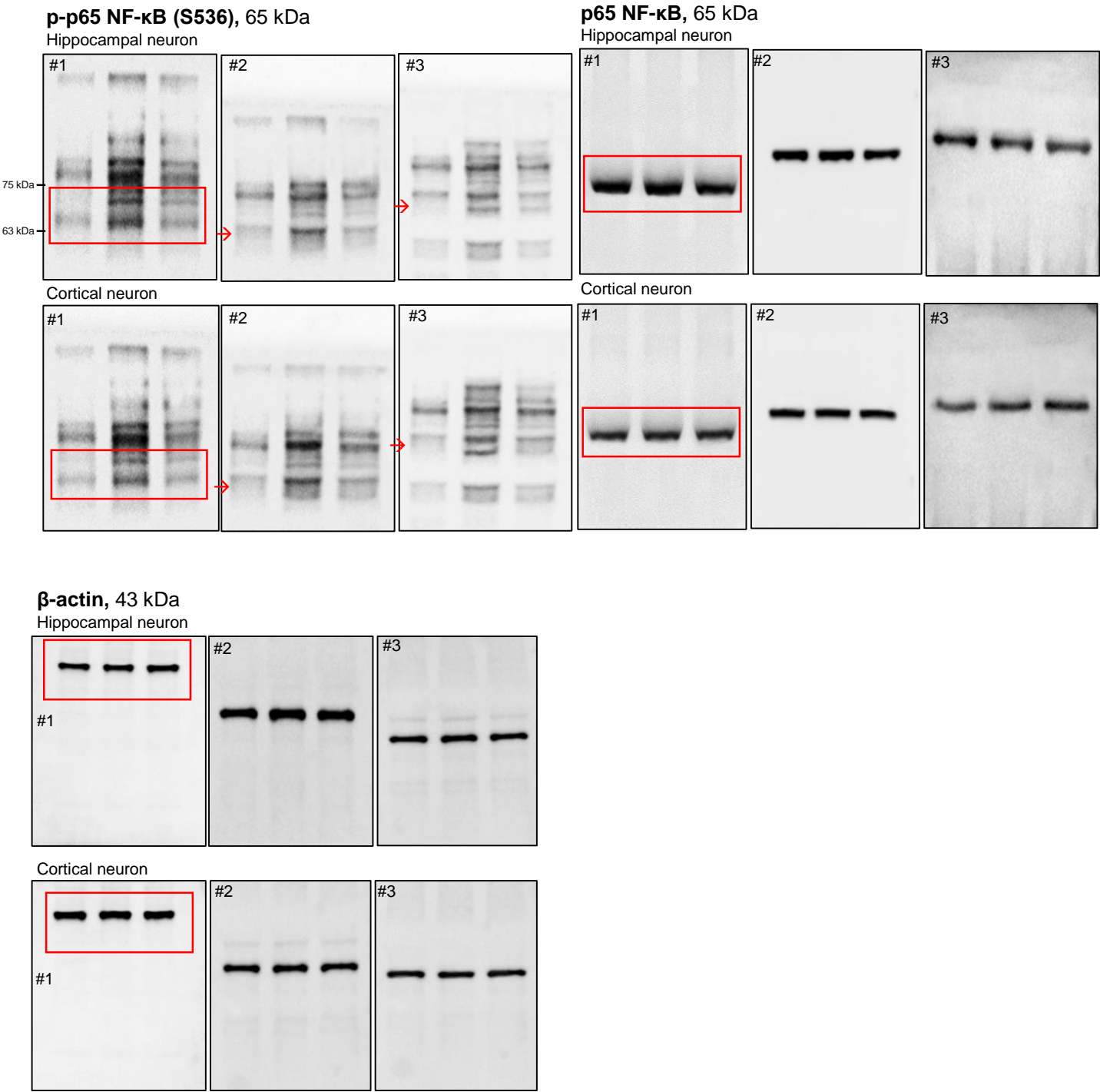
Supplementary Information

Full-length blots for Figure 3a and Figure 3b



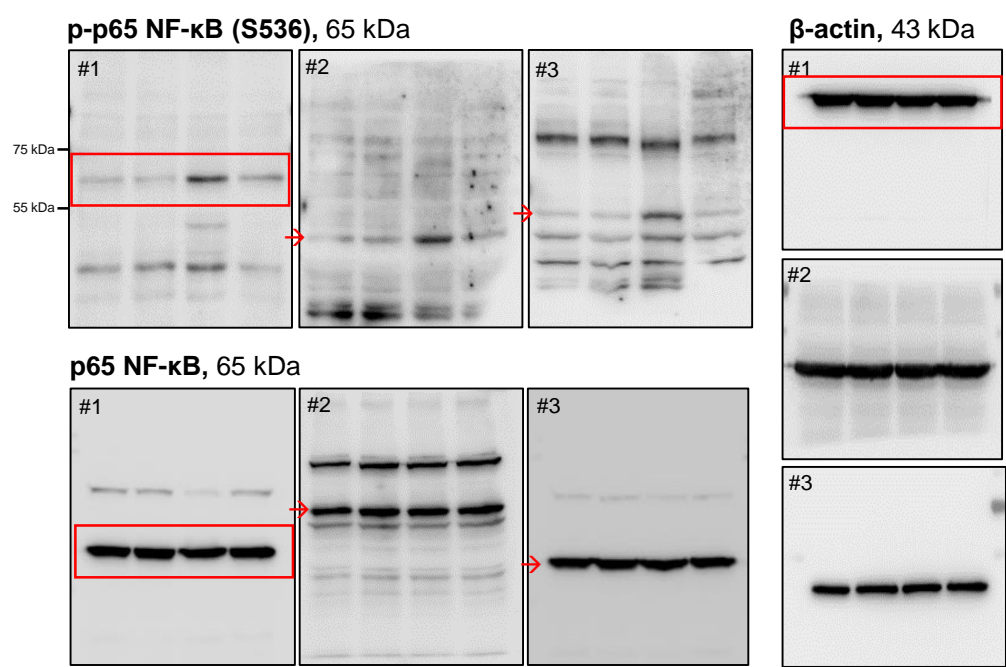
Supplementary Information

Full-length blots for **Figure 3a** and **Figure 3b**

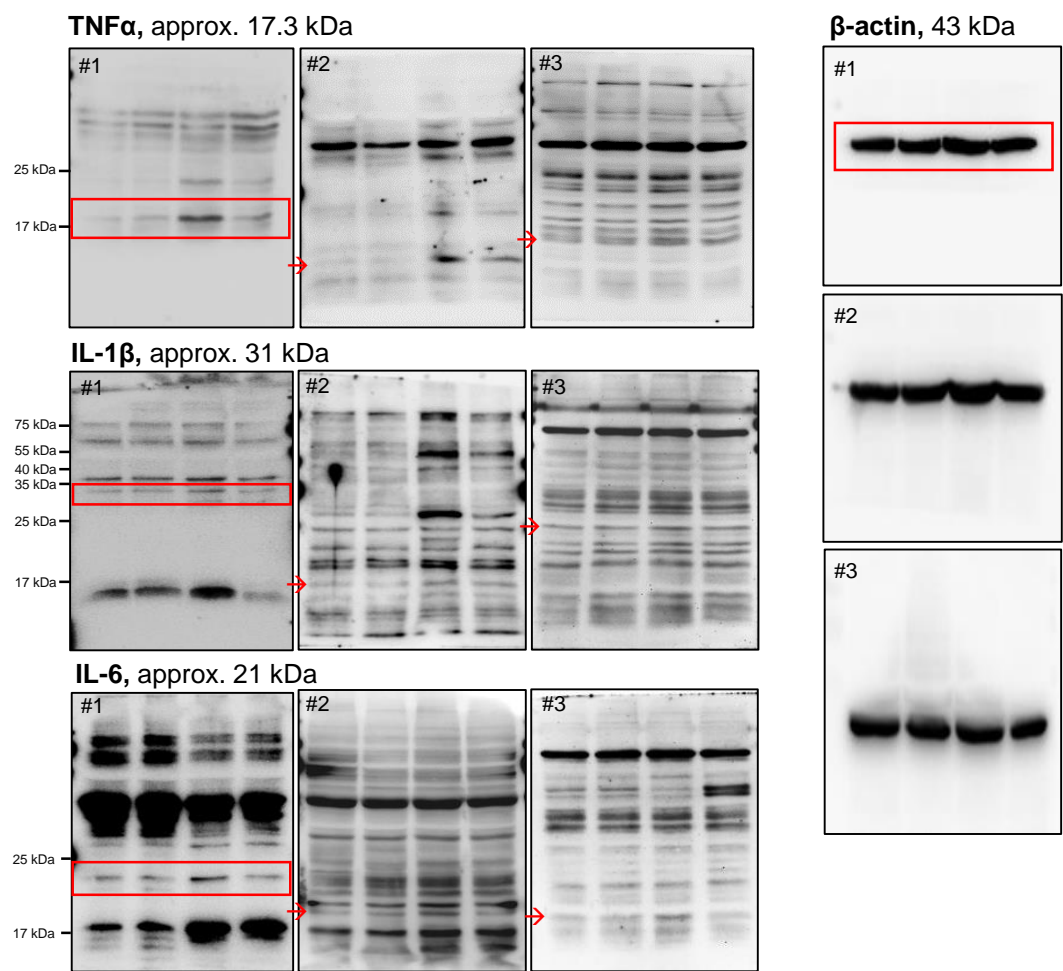


Supplementary Information

Full-length blots for **Figure 4a**

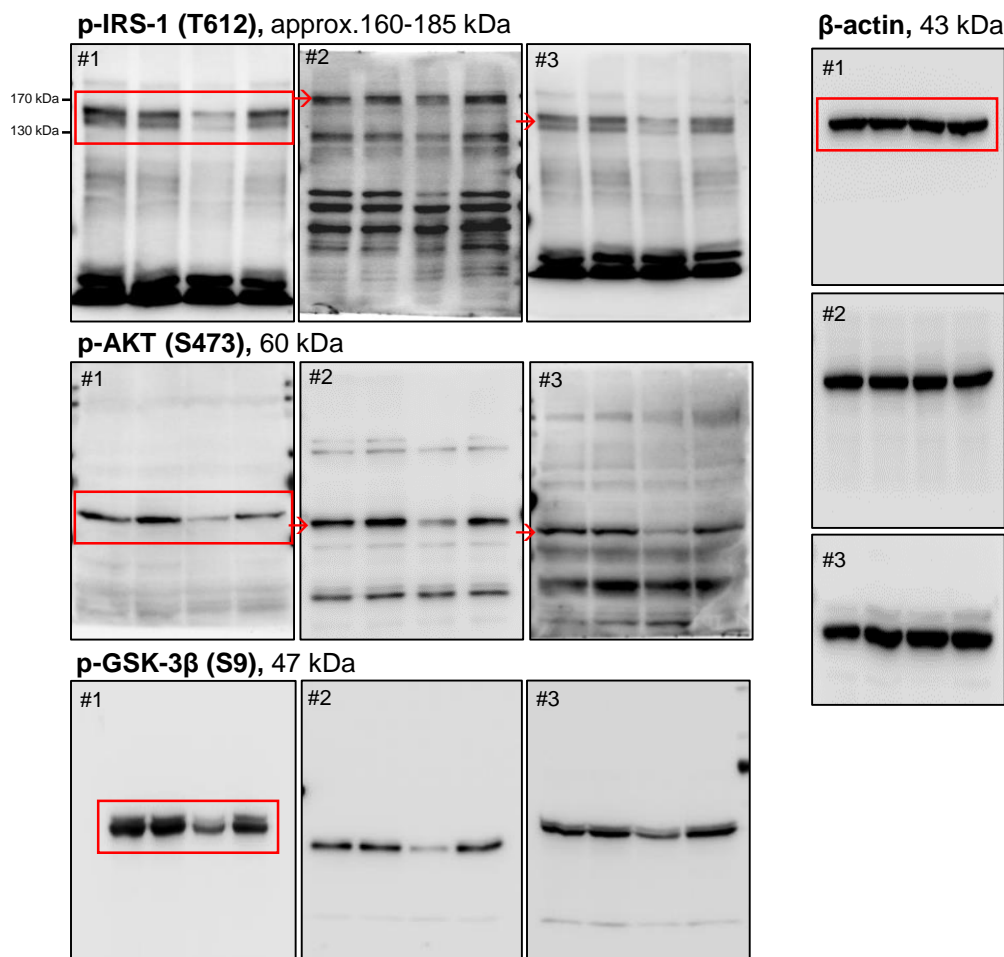


Full-length blots for **Figure 4b**



Supplementary Information

Full-length blots for **Figure 4c**



Full-length blots for **Figure 5d**

