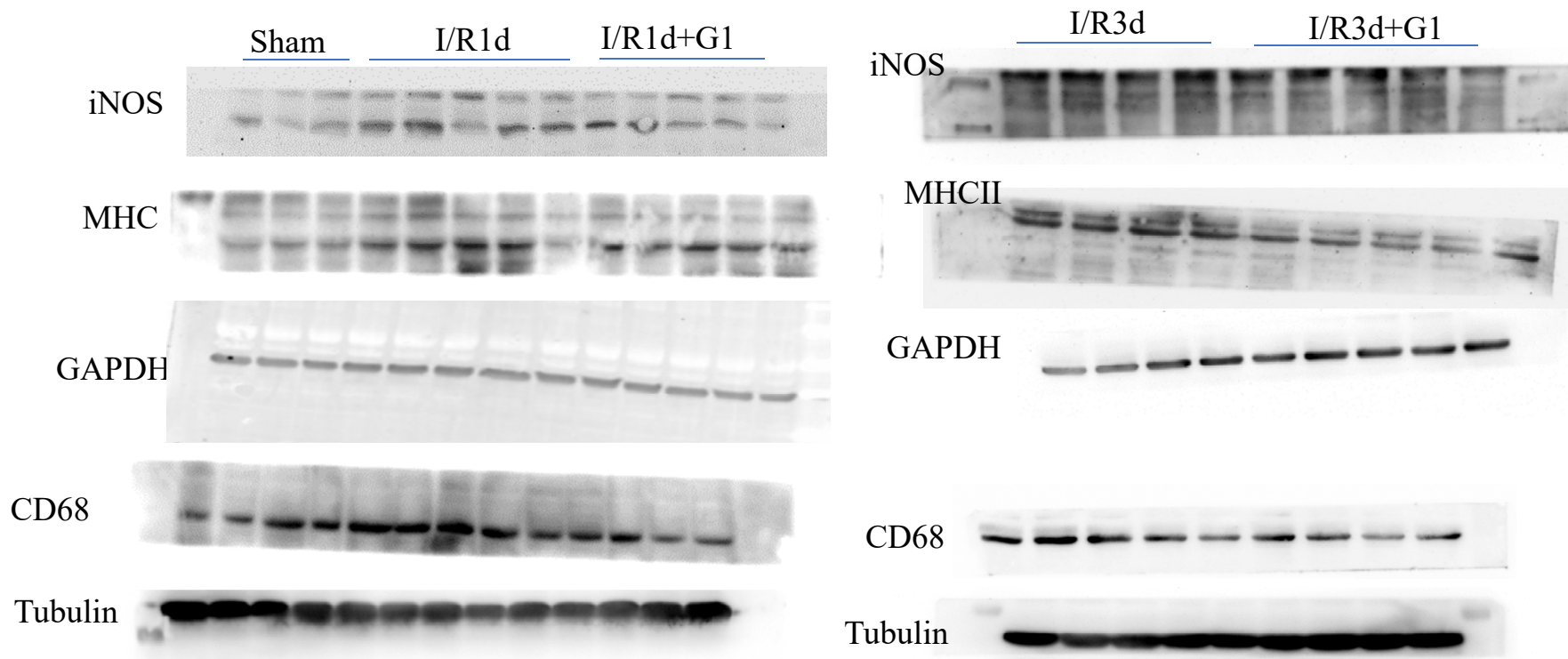
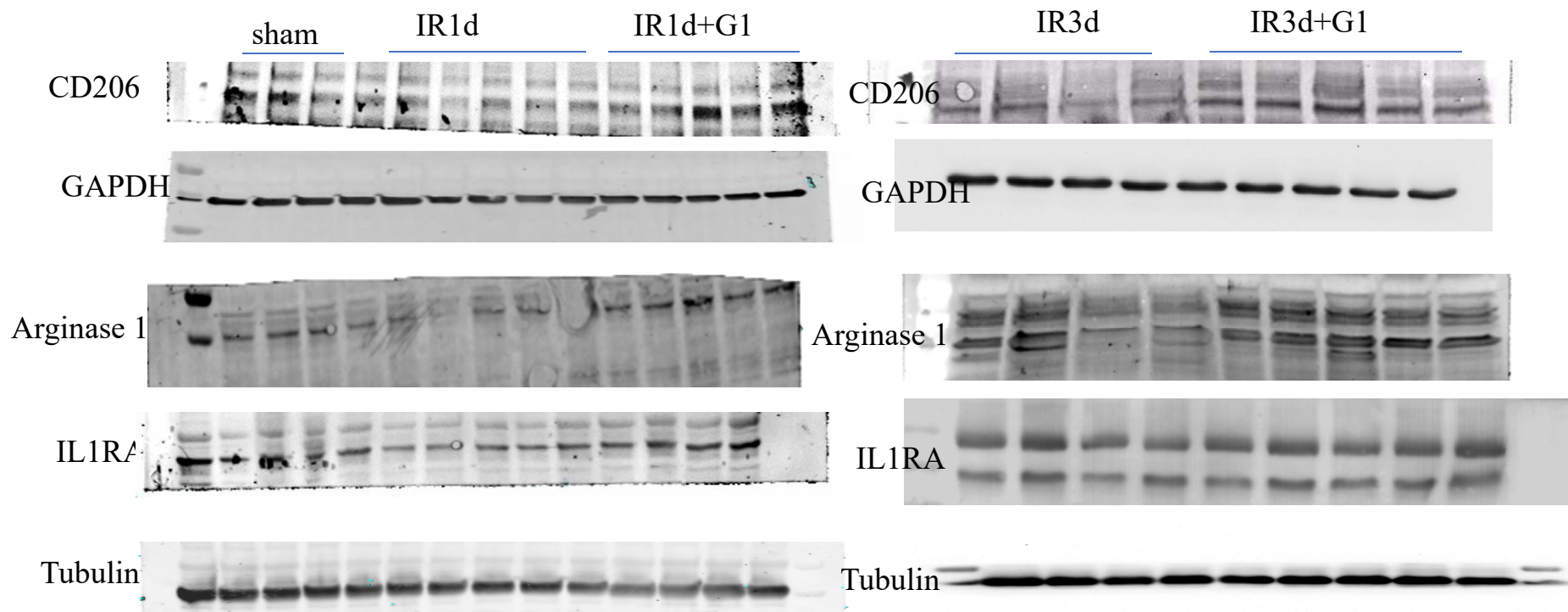


Supplementary: Original Western blot images

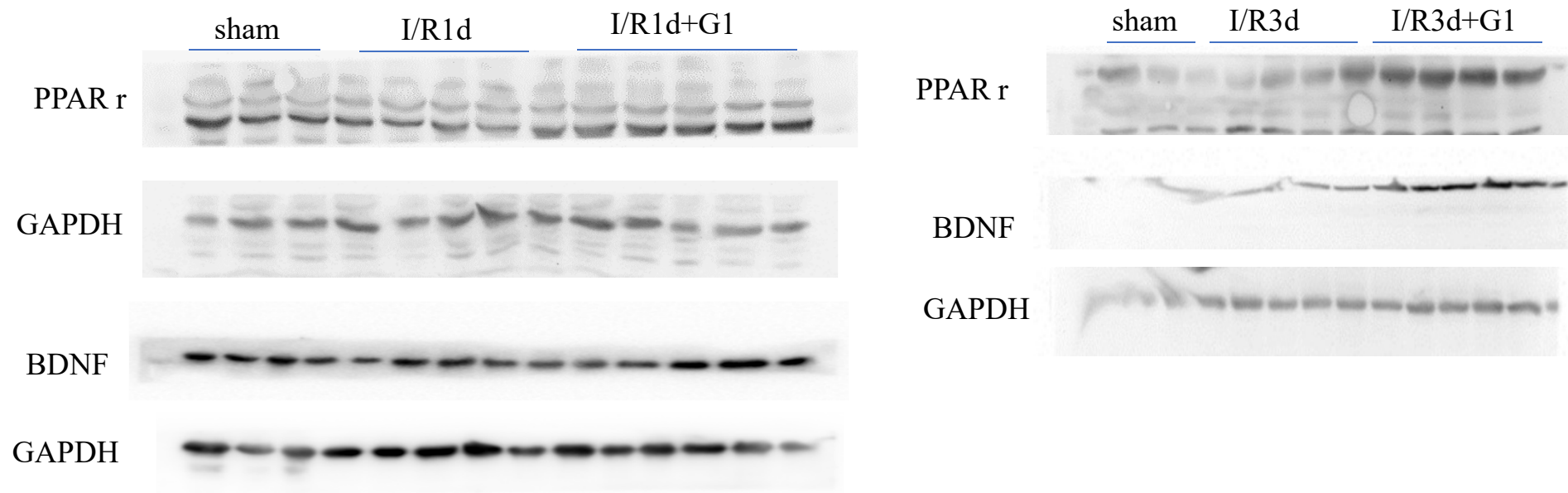
**Figure S1. G1 administration suppresses M1 phenotypic markers of microglia in hippocampal CA1 region following GCI**



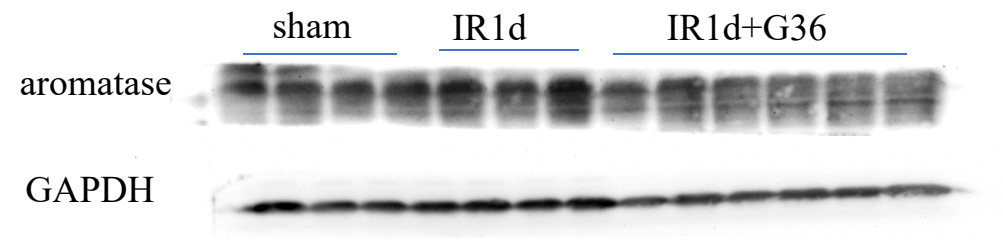
**Figure S2. G1 administration enhances M2 markers of microglia in the hippocampal CA1 region following GCI**



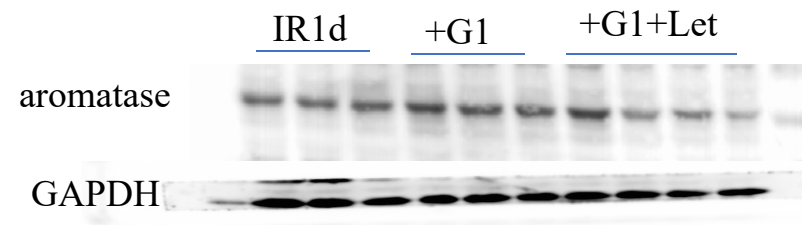
**Figure S3. G1 administration increases the levels of brain-derived neurotrophic Factor (BDNF) and pro-survival transcription factor PPAR $\gamma$  in the hippocampal CA1 region after GCI**



**Figure S4. GPER antagonist G36 decreases aromatase protein expression in hippocampal CA1 region at 1d after GCI**



**Figure S5. Aromatase inhibitor letrozole has no effect on aromatase protein levels at 1d reperfusion in hippocampal CA1 region of with and without G1-treated rats**



**Figure S6. Using GPER antagonist G36 and aromatase inhibitor letrozole confirms the synergistic action of G1 and BDE2 in promoting protein expression of IL-4, PPAR $\gamma$ , and BDNF in the hippocampal CA1 region at 1d after GCI**

