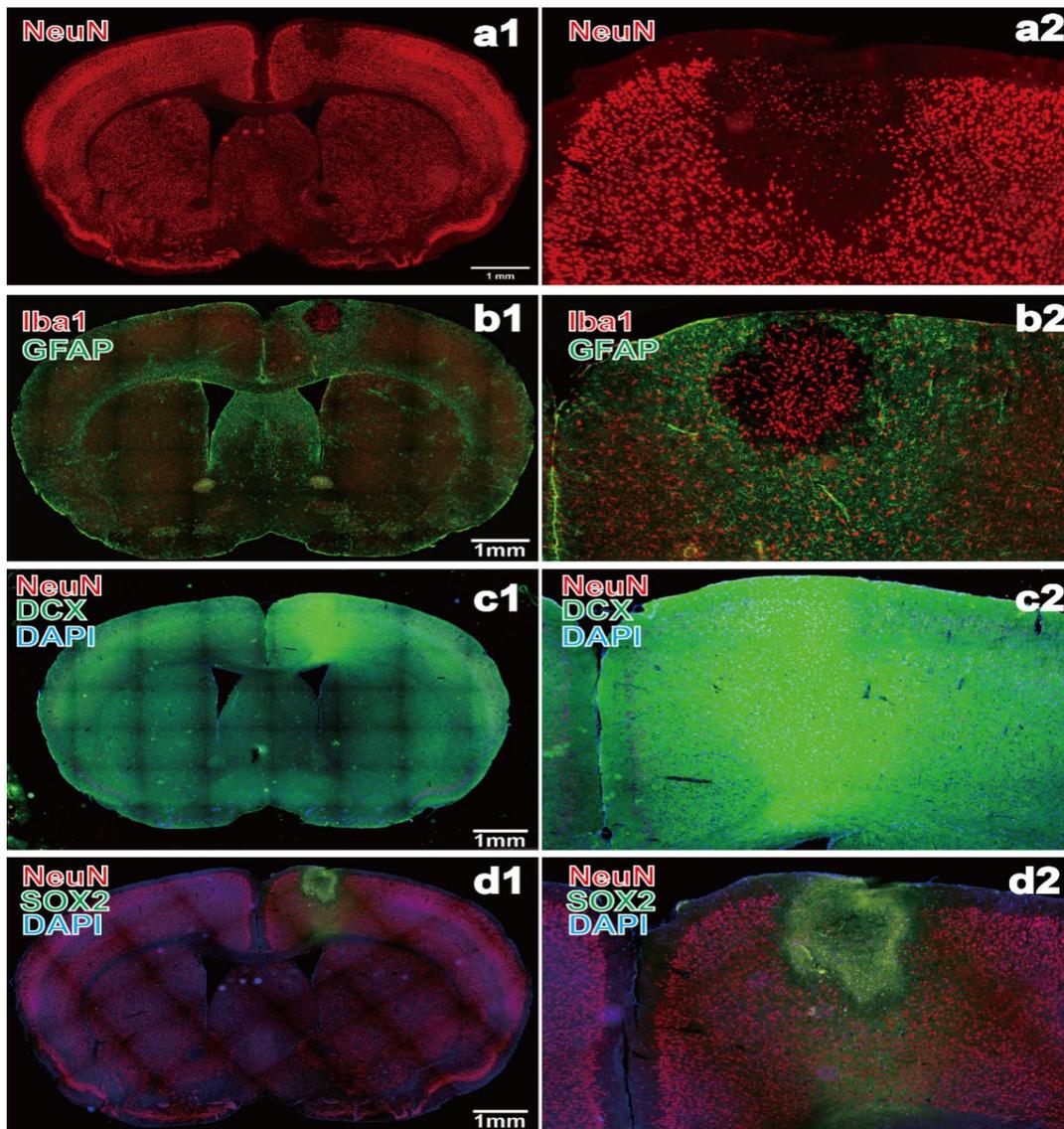


## Supplementary Material

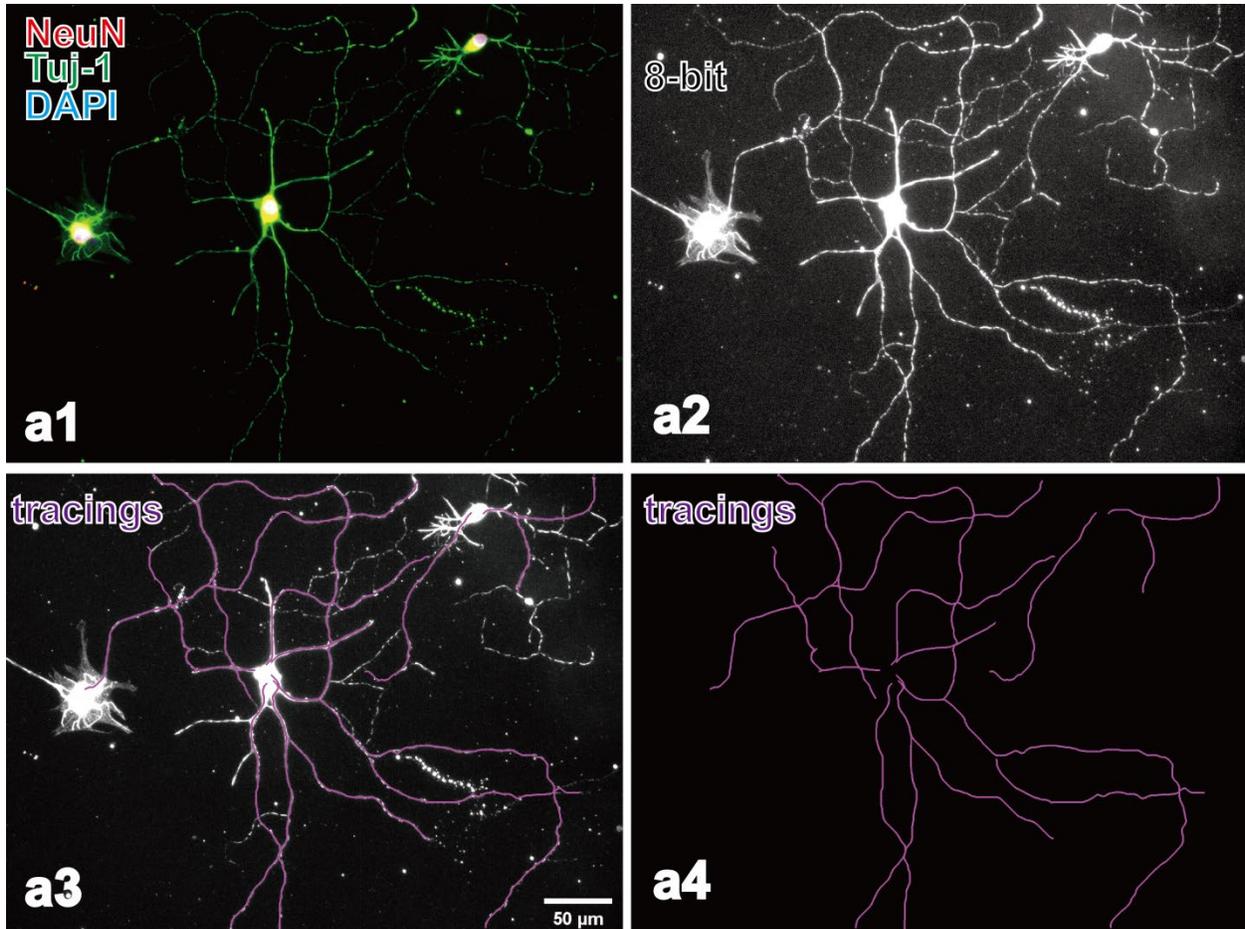
# The Antioxidant Phytochemical Schisandrin A Promotes Neural Cell Proliferation and Differentiation after Ischemic Brain Injury

Wentian Zong <sup>1</sup>, Mostafa Gouda <sup>2,3,\*</sup>, Enli Cai <sup>4</sup>, Wang Ruofeng <sup>5</sup>, Xu Weijie <sup>1</sup>, Yuming Wu <sup>4,\*</sup>, Paulo E. S. Munekata <sup>6,\*</sup> and José M. Lorenzo <sup>6,7</sup>



**Figure S1.** (a1) NeuN loss of brain ischemic area (reddish grey) at 48h at Scale 1mm). (a2) A higher magnification image of stroke area. (b1) Enhanced GFAP expression in the transition zone between ischemic core (Iba1+) and penumbra (GFAP+) after photothrombosis. (b2) A higher magnification image of between ischemic core (Iba1+) and penumbra (GFAP+) after photothrombosis. (c1) Enhanced

DCX expression in the ischemic area after photothrombosis. (c2) A higher magnification image of the enhanced DCX expression in the ischemic area. (d1) Enhanced SOX2 expression in the ischemic area after photothrombosis, NeuN (red), DAPI (blue). (d2) A higher magnification image of SOX2 expression in the ischemic area.



**Figure S2.** NeuronJ - ImageJ software was used to track and analysis the axons length. (a1) Neuron staining by NeuN(red), Tuj-1(green) . (a2) Convert the picture to 8-bits. (a3) tracking the axons with NeuronJ - ImageJ software (purple) .(b4)Axon tracking is shown separately. Scale bars 50 µm.