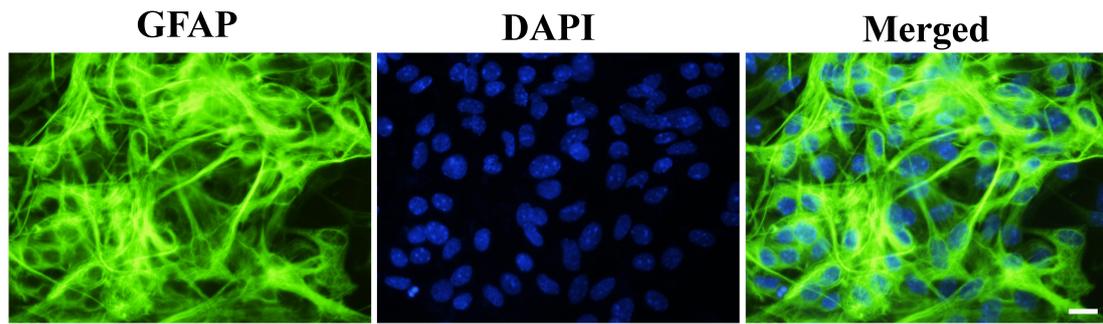


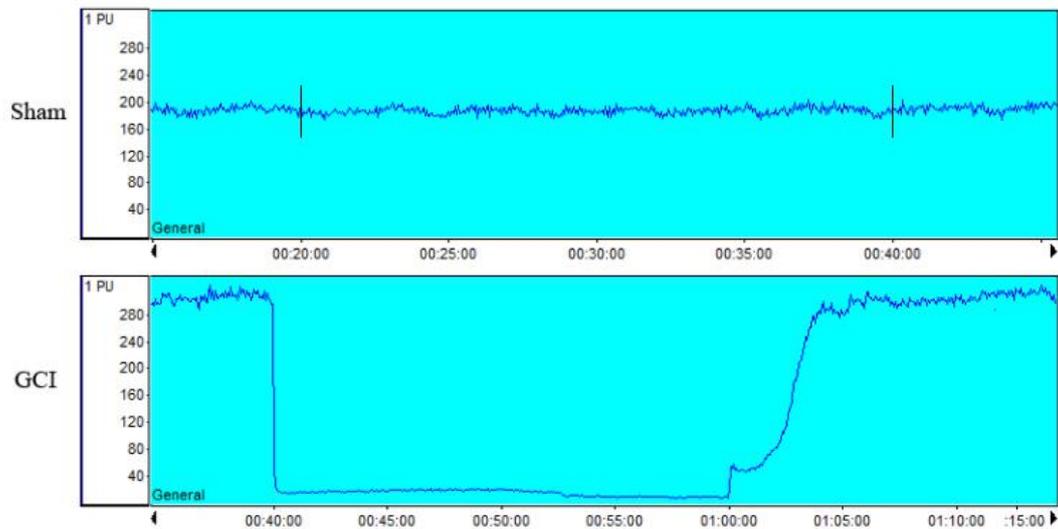
**Supporting information 1**



**Supplementary Figure 1.** Identification of primary cultured astrocytes.

GFAP is a specific marker for astrocytes. The analysis revealed that at least 95% of the cultured cells were GFAP-positive. Scale bar: 20  $\mu\text{m}$ .

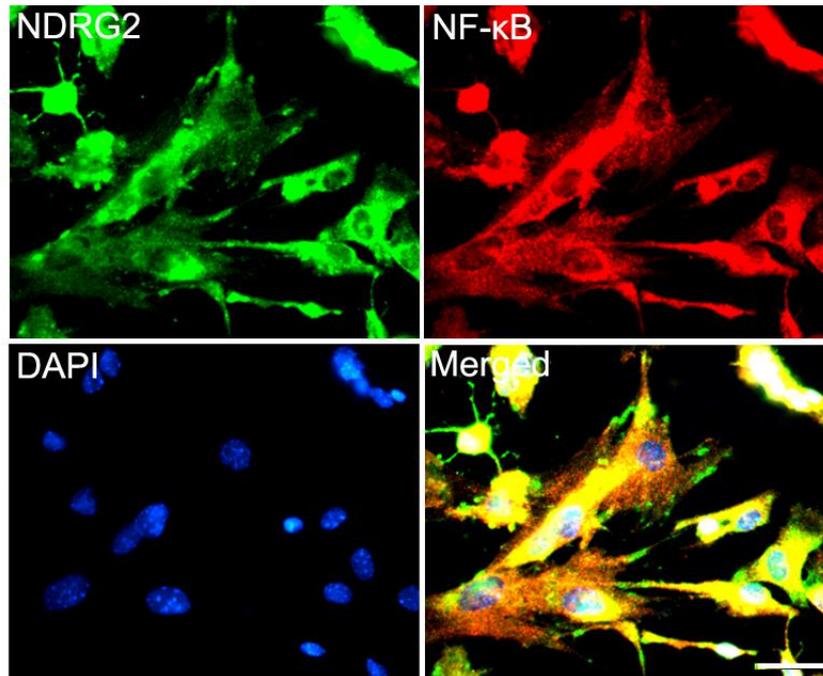
## Supporting information 2



**Supplementary Figure 2.** Regional Cerebral Blood Flow (rCBF) Measurements.

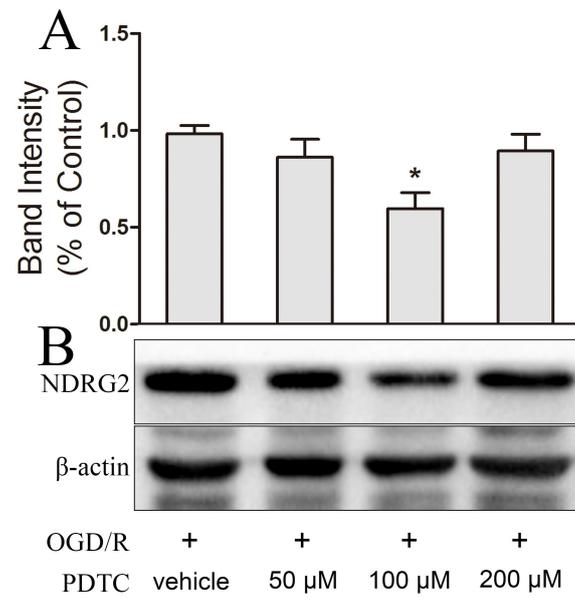
The rCBF was immediately reduced to <10 % of the pre-ischemic baseline after GCI and remained constant during the ischemic period in all animals. After the clips were removed, and the rCBF returned to pre-ischemic values within 5 min.

**Supporting information 3**



**Supplementary Figure 3.** Colocalization of NDRG2 and NF- $\kappa$ B in primary cultured astrocytes. Scale bar: 20  $\mu$ m.

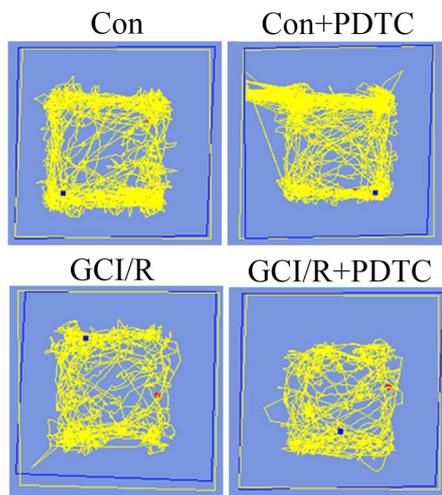
#### Supporting information 4



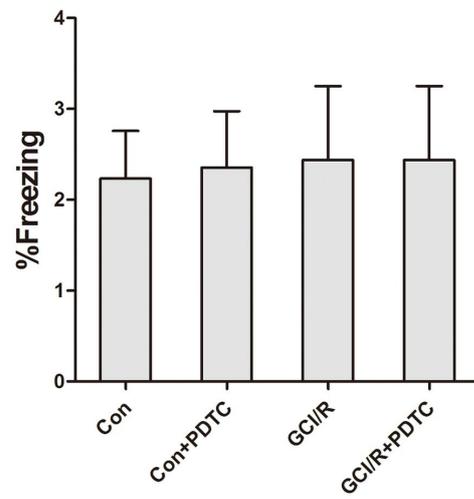
**Supplementary Figure 4.** The effect of different doses PDTC on NDRG2 expression after OGD/R.\* $p < 0.05$  vs. Vehicle group.

## Supporting information 5

A



B



**Supplementary Figure 5** The movement tracks and freezing time before footshocks in different group.

## Supporting information 6

Group		MABP (mmHg)	PH	P <sub>O2</sub> (mmHg)	P <sub>CO2</sub> (mmHg)	
Con group	Sham	pre	70±0.5	7.42±0.02	174±10	36.5±1.3
		during	72±0.6	7.38±0.02	166±13	38.5±2.3
		post	70±0.7	7.40±0.02	169±9	37.8±1.7
	GCI/R	pre	71±0.5	7.41±0.02	175±9	36.6±1.6
		during	71±0.8	7.37±0.02	165±14	37.4±2.3
		post	69±0.4	7.39±0.02	174±8	35.8±1.7
PDTC group	Vehicle	pre	71±0.4	7.42±0.02	170±10	36.8±1.8
		during	72±0.5	7.38±0.02	164±14	37.6±2.4
		post	70±0.4	7.40±0.02	173±10	36.3±2.0
	GCI/R	pre	73±0.6	7.40±0.02	177±10	36.7±1.7
		during	74±0.7	7.36±0.03	166±14	38.2±2.5
		post	72±0.5	7.41±0.02	171±10	37.1±1.6

**Supplementary table 1.** Physiological parameters of the animals during the GCI period. pre, the measurement prior to GCI; MABP, mean arterial blood pressure. There were no significant differences between the groups at the corresponding time points.