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Supporting Information

Andrographolide inhibits PI3K/AKT-dependent NOX2 and iNOS expression protecting mice against hypoxia/ischemia-induced oxidative brain injury

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Table 1S Physiological measurements before and after right middle cerebral artery occlusion.

Parameters	Sham	CI/R	CI/R+AND (100 µg/kg)	CI/R+AND (10 µg/kg)	CI/R+DPI (1 mg/kg)
pH					
before MCAO	7.38±0.01	7.36±0.02	7.33±0.02	7.32±0.01	7.35±0.03
after MCAO	7.42±0.02	7.40±0.02	7.41±0.01	7.41±0.02	7.42±0.01
PaO ₂ (mmHg)					
before MCAO	158±6	156±7	153±5	158±8	155±7
after MCAO	160±4	158±6	142±3	141±5	144±5
PaCO ₂ (mmHg)					
before MCAO	35±2	36±3	34±4	38±4	35±4
after MCAO	38±3	35±2	39±3	36±3	37±2
MABP (mm Hg)					
before MCAO	88±1	94±2	91±2	90±2	92±1
after MCAO	89±2	92±1	86±1	93±1	95±2
HR (bpm)					
before MCAO	535±23	528±28	521±24	525±21	526±22
after MCAO	529±25	515±27	509±25	517±23	514±26

Sham, sham-operated; CI/R, cerebral ischemia/reperfusion; CI/R+AND, cerebral ischemia/reperfusion plus andrographolide; CI/R+DPI, cerebral ischemia/reperfusion plus diphenylethylamine; MCAO, right middle cerebral artery occlusion; MABP, mean arterial blood pressure; HR, heart rate; bpm, beats per min; Data are presented as mean±SEM.

Fig. 1S Chemical structure of andrographolide.

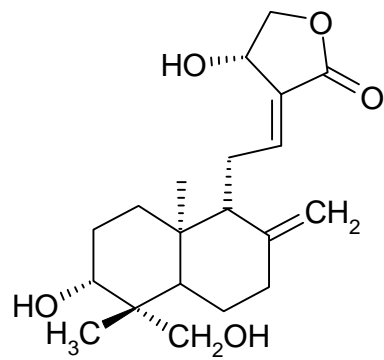


Fig. 2S Working model for the ischemic injury protective effect of andrographolide.

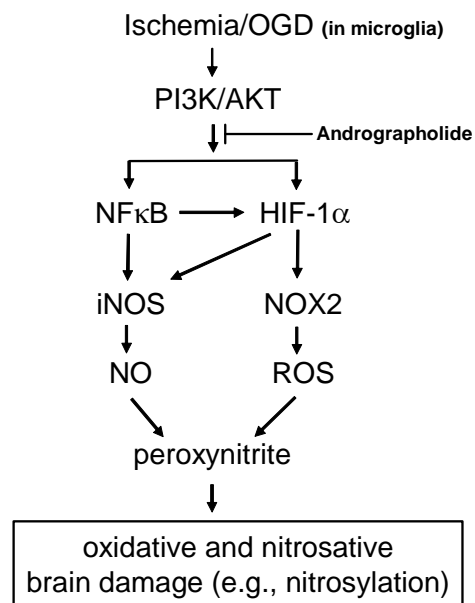
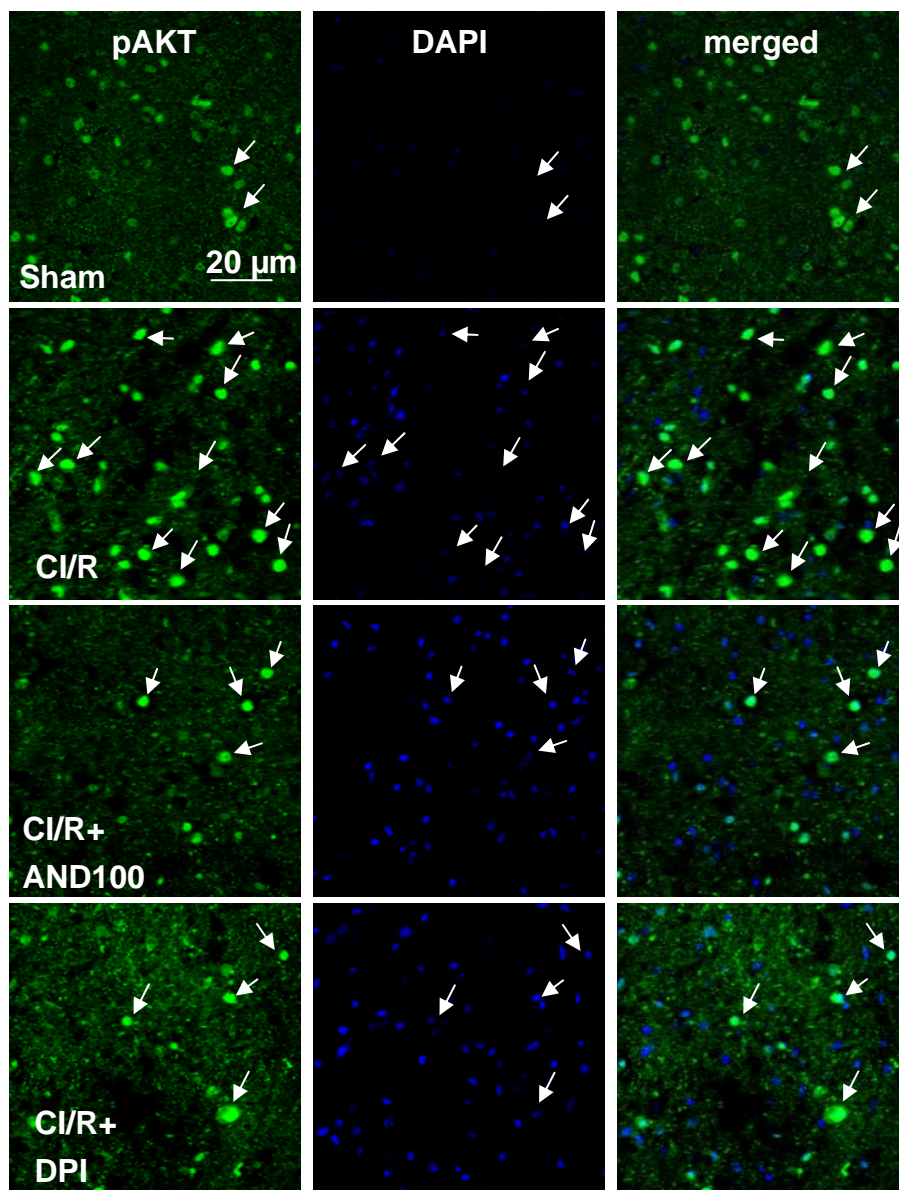


Fig. 3S Effects of andrographolide on changes in pAKT up-expression at 24 h after cerebral ischemic/reperfusion (CI/R) injury in mice.



Confocal images of pAKT up-expression in the ipsilateral peri-infarct region. The nuclei of these cells were visualized by DAPI staining (blue). Arrows indicate the up-expression of pAKT.