

Table SI. Relative intensity of ProT immunofluorescence staining after genomic transfection.

Transfection	Post-insult intensity		
	Day 1	Day 2	Day 3
Sham	1.00±0.05	1.00±0.10	1.00±0.08
ProT	1.27±0.07 <sup>a</sup>	1.30±0.10	1.17±0.11 <sup>a</sup>
ProTΔNLS	1.49±0.05 <sup>a</sup>	1.43±0.07 <sup>a</sup>	1.43±0.29
OGD	1.15±0.05	1.27±0.19	1.10±0.12
ProT + OGD	1.57±0.01 <sup>b</sup>	1.70±0.19 <sup>b</sup>	1.46±0.07
ProTΔNLS OGD	+ 1.46±0.13 <sup>b</sup>	1.50±0.12	1.37±0.15

<sup>a</sup>P<0.05 vs. sham, <sup>b</sup>P<0.05 vs. OGD controls. ProT, prothymosin  $\alpha$ ; OGD, oxygen and glucose deprivation; NLS, nuclear localizing signal.

Table SII. Dendritic arborizations and length of primary cortical neurons transfected with ProT gene.

A, Branches count			
Group	Post-insult		
	Day 1	Day 2	Day 3
Sham	3.78±1.19	4.62±1.92	4.64±1.38
ProT	4.44±1.34	4.75±1.64	5.09±1.54
NLS	5.23±1.62 <sup>a</sup>	5.33±1.92	4.78±1.16
OGD	3.35±1.65	3.67±1.17	3.56±1.51 <sup>a</sup>
ProT + OGD	4.87±1.56	4.64±1.65 <sup>b</sup>	4.36±1.48
ProTΔNLS + OGD	4.55±1.62 <sup>b</sup>	4.35±1.30	4.27±1.27

  

B, Length (μm)			
Group	Post-insult		
	Day 1	Day 2	Day 3
Sham	85.85±34.90	117.38±58.10	128.86±45.54
ProT	93.95±35.30	132.16±46.65	155.21±53.14
NLS	93.48±25.45	132.76±67.42	137.87±49.39
OGD	74.27±42.74	78.93±44.39 <sup>a</sup>	80.92±47.20 <sup>a</sup>
ProT + OGD	93.72±31.77	114.44±55.85 <sup>b</sup>	118.17±56.86 <sup>b</sup>
ProTΔNLS + OGD	99.30±35.07	106.87±34.53	140.18±58.26 <sup>b</sup>

<sup>a</sup>P<0.05 vs. sham, <sup>b</sup>P<0.05 vs. OGD controls. ProT, prothymosin  $\alpha$ ; OGD, oxygen and glucose deprivation; NLS, nuclear localizing signal.

Table SIII. Dendritic arborizations and length of primary cortical neuron treatment with ProT protein.

A, Branches count			
Group	Post-insult		
	Day 1	Day 2	Day 3
Sham	4.92±0.97	6.80±1.64	6.43±1.62
OGD	3.60±1.06 <sup>a</sup>	4.14±1.24 <sup>a</sup>	4.41±1.07 <sup>a</sup>
ProT (1 µg/ml) + OGD	4.73±1.88 <sup>b</sup>	7.36±1.34 <sup>b</sup>	5.38±1.48 <sup>b</sup>
ProTΔNLS (1 µg/ml) + OGD	4.67±1.18 <sup>b</sup>	6.37±1.57 <sup>b</sup>	5.24±1.68 <sup>b</sup>

  

B, Length (µm)			
Group	Post-insult		
	Day 1	Day 2	Day 3
Sham	104.15±44.53	270.58±95.75	252.97±67.11
OGD	52.38±15.35 <sup>a</sup>	103.25±39.00 <sup>a</sup>	92.28±38.75 <sup>a</sup>
ProT (1 µg/ml) + OGD	101.34±35.45 <sup>b</sup>	216.42±67.60 <sup>b</sup>	153.54±57.14 <sup>b</sup>
ProTΔNLS (1 µg/ml) + OGD	96.50±34.48 <sup>b</sup>	178.79±44.53 <sup>b</sup>	148.23±53.81 <sup>b</sup>

<sup>a</sup>P<0.05 vs. sham, <sup>b</sup>P<0.05 vs. OGD controls. ProT, prothymosin  $\alpha$ ; OGD, oxygen and glucose deprivation; NLS, nuclear localizing signal.

Table SIV. LCBF results.

Group	n	Body temperature, °C	LCBF, ml/min/100 g					
			Pre-occlusion		Ischemia		Reperfusion	
			Contralatera 1	Ipsilatera 1	Contralatera 1	Ipsilatera 1	Contralatera 1	Ipsilatera 1
WT	7	37.1±0.02	59.8±1.3	60.1±0.8	59.8±2.5	11.3±1.0 <sup>a</sup>	58.9±2.6	32.4±4.7 <sup>a</sup>
WT ProT (IP)	8	37.0±0.02	59.9±2.2	59.4±2.2	59.1±1.9	11.1±1.0 <sup>a</sup>	58.3±2.3	32.4±4.0 <sup>a</sup>
ProT transgeni c	8	37.0±0.03	59.3±1.0	60.0±1.2	58.1±1.7	10.4±0.9 <sup>a</sup>	58.8±3.2	29.5±2.3 <sup>a</sup>

LCBF and body temperature before, during, and after MCA occlusion. Body temperature was keep constant at 37°C. LCBF were measured at both contralateral and ipsilateral part. LCBF during ischemia at ipsilateral part decreased significantly compared to contralateral part (<sup>a</sup>P<0.05). LCBF, local cortical blood perfusion.