

Table S1. Summary of vascular areas (Figure 1B)

Summary of vascular areas			
N (Images)	Hours after occlusion	Vascular areas (μm^2)	<i>p</i> -Value
9	3	321.04 \pm 43.98	<0.0001 3hr vs. 6hr, 9hr, 12hr, 24hr
6	6	199.33 \pm 25.07	< 0.001 6hr vs. 9hr, 12hr, 24hr
6	9	89.54 \pm 14.00	
8	12	87.86 \pm 12.13	
8	24	86.80 \pm 8.78	

Data are presented as mean \pm S.E.M

Table S2. TRPM4 current density in control (Figure 2B) and ATP depletion (Figure 2D) condition

TRPM4 current density					
IgG treatment			M4P treatment		
N	Current density (pA/pF)	Membrane potential (mV)	N	Current density (pA/pF)	<i>p</i> -Value vs IgG
15	-94.76 \pm 21.44	-100 Control	12	-44.32 \pm 10.17	0.041
15	155.47 \pm 29.59	+100 Control	12	58.05 \pm 8.51	0.004
12	-230.52 \pm 61.01	-100 ATP depletion	9	-64.58 \pm 28.10	0.039
12	266.28 \pm 40.69	+100 ATP depletion	9	107.17 \pm 29.62	0.008

Data are presented as mean \pm S.E.M

Table S3. Summary of infarct area 24 hrs after operation (Figure 3D)

Summary of infarct area			
N (Rat brains)	Treatment	Infarct area (%)	<i>p</i> -Value
8	M4P	11.80 \pm 2.05	<0.01 M4P vs. Vehicle, pMCAO
8	IgG	14.13 \pm 1.52	
8	Vehicle	20.20 \pm 1.27	
7	pMCAO	22.15 \pm 1.97	

Data are presented as mean \pm S.E.M

Table S4. Summary of the vascular diameter (Figure 4B)

Summary of the vascular diameter			
N (Images)	Treatment	Vascular diameter (μm)	<i>p</i> -Value
14	pMCAO	5.02 \pm 0.19	<0.0001 vs. IgG
14	IgG	6.13 \pm 0.14	<0.05 vs. M4P
14	M4P	6.67 \pm 0.10	

Data are presented as mean \pm S.E.M

Table S5. Summary of Evens blue quantification (Figure 4D)

Summary of Evens blue quantification					
IgG treatment			M4P treatment		
N (Rat)	Evens blue (µg/g tissue)	Brain hemisphere	N (Rat)	Evens blue (µg/g tissue)	p-Value vs IgG
8	3.89 ± 0.66	Ipsi	10	2.40 ± 0.29	<0.05
8	1.25 ± 0.14	Contra	10	1.27 ± 0.14	

Data are presented as mean ± S.E.M

Table S6. Summary of cerebral blood flow (Figure 5C)

Summary of cerebral blood flow of 7 hr reperfusion					
IgG treatment			M4P treatment		
N (Rat)	Percentage of Baseline	Treatment	N (Rat)	Percentage of Baseline	p-Value vs IgG
6	24.22 ± 2.95	Occlusion	9	25.85 ± 2.13	<0.01
6	30.25 ± 5.25	Reperfusion	9	43.03 ± 3.83	

Data are presented as mean ± S.E.M

Table S7. Summary of cerebral blood flow (Figure 5D)

Summary of cerebral blood flow of 3 hr reperfusion					
IgG treatment			M4P treatment		
N (Rat)	Percentage of Baseline	Treatment	N (Rat)	Percentage of Baseline	p-Value vs IgG
10	31.22 ± 2.08	Occlusion	6	30.81 ± 2.74	<0.01
10	64.26 ± 6.98	Reperfusion	6	89.44 ± 8.22	

Data are presented as mean ± S.E.M

Table S8. Assessment of motor functions by Rotarod test (Figure 5E)

Rotarod test				
N (Rat)	Day after MCAO	Treatment	Percentage of Baseline	p-Value
7	1	Sham	86.27 ± 6.20	<0.001 vs. M4P, pMCAO, IgG for day 1
7	1	M4P	18.28 ± 7.35	
7	1	pMCAO	25.21 ± 4.28	
7	1	IgG	10.96 ± 4.70	
7	3	Sham	90.78 ± 4.87	<0.001 vs. M4P, pMCAO, IgG for day 3
7	3	M4P	52.86 ± 3.86	
7	3	pMCAO	46.02 ± 5.90	
7	3	IgG	30.67 ± 7.30	
7	5	Sham	93.28 ± 3.94	
7	5	M4P	84.09 ± 2.42	

7	5	pMCAO	59.29 ± 7.51
7	5	IgG	72.00 ± 7.32
7	7	Sham	95.89 ± 5.07
7	7	M4P	86.23 ± 3.65
7	7	pMCAO	75.01 ± 4.48
7	7	IgG	82.31 ± 3.09

Data are presented as mean ± S.E.M