## **Supplemental Figures**



**Supplemental Figure 1.** The uncropped, original image of immunoblot shown in Figure 1C.

Parameter	WT	Low TF	
Body weight (g)	24.0±1.2	24.3±1.7	
Glucose (mg/ml)	138.8±22.9	136.9±18.2	
Heart Rate (per min)	464.4±27.0	473.5±20.7	
O <sub>2</sub> Saturation (%)	98.8±0.4	98.6±0.3	
Breath Rate (per min)	166.9±21.0	160.2±12.0	

Supplemental Table 1. Physiological parameters of WT and Low TF mice. Various parameters were determined in 2 months old WT and Low TF mice (n=5-10). Data (mean  $\pm$  SEM) were analyzed by unpaired t test.

Parameter	TF	NES∆ TF	
Body weight (g)	25.1±1.4	24.1±0.8	
Glucose (mg/ml)	131.0±14.0	130.1±18	
Heart Rate (per min)	463.2±29.3	455.8±25.8	
O <sub>2</sub> Saturation (%)	98.8±0.5	98.5±0.4	
Breath Rate (per min)	165.8±19.0	174.2±15	

Supplemental Table 2. Physiological parameters of  $TF^{WT}$  and  $TF^{NES\Delta}$  mice. Various parameters were determined in 3 months old  $TF^{WT}$  and  $TF^{NES\Delta}$  mice (n=5-10). Data (mean ± SEM) were analyzed by unpaired t test.



Supplemental Figure 2. Collateral number and diameter in  $TF^{WT}$  and  $TF^{NES\Delta}$  mice. (A and B) Representative images of brain vasculature in  $TF^{WT}$  and  $TF^{NES\Delta}$  mice after clearing, dilation, fixation, and filling with high-viscosity polyurethane restricted from capillary transit. Red asterisks indicate collaterals. Collateral number (C) and collateral diameter (D) measured in  $TF^{WT}$  (n=5) and  $TF^{NES\Delta}$  (n=5) mice. Data (mean ± SEM) were analyzed by unpaired t test.



Supplemental Figure 3. Collateral number and diameter in WT and Low TF mice. (A and B) Representative images of brain vasculature in WT and Low TF mice after clearing, dilation, fixation, and filling with high-viscosity polyurethane restricted from capillary transit. Red asterisks indicate collaterals. Collateral number (C) and diameter (D) measured  $TF^{WT}$  (n=5) and  $TF^{NES\Delta}$  (n=5) mice. Data (mean ± SEM) were analyzed by unpaired t test.



**Supplemental Figure 4.** Analysis of behavioral deficit in WT (n=9) and low TF (n=10) mice subjected to 1 hour of ischemia followed by 23 hours of reperfusion. Data on bar graph are presented as mean  $\pm$  SEM and were analyzed by unpaired t test. \* p< 0.05, \*\*p<0.01)

WT	WT	LowTF	
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Coordinate	Target	Coordinate	Target	Coordinate	Target	Coordinate	Target
A1, A2	Reference Spot	B19, B20	IL-1β	C17, C18	IL-16	D15, D16	MIP-1α
A23, A24	Reference Spot	B21, B22	IL-1ra	C19, C20	IL-17	D17, D18	ΜΙΡ-1β
B1, B2	BLC	B23, B24	IL-2	C21, C22	IL-23	D19, D20	MIP-2
B3, B4	C5/C5a	C1, C2	IL-3	C23, C24	IL-27	D21, D22	RANTES
<b>B5, B6</b>	G-CSF	C3, C4	IL-4	D1, D2	IP-10	D23, D24	SDF-1
B7, B8	GM-CSF	C5, C6	IL-5	D3, D4	I-TAC	E1, E2	TARC
<b>B9, B10</b>	I-309	C7, C8	IL-6	D5, D6	KC/CXCL1	E3, E4	TIMP-1
B11, B12	Eotaxin	C9, C10	IL-7	D7, D8	M-CSF	E5, E6	TNF-a
B13, B14	sICAM-1	C11, C12	IL-10	D9, D10	JE/CCL2	E7, E8	TREM-1
B15, B16	IFN-y	C13, C14	IL-13	D11, D12	MCP-5	F1, F2	Reference Spot
B17, B18	IL-1a	C15, C16	IL-12 p70	D13, D14	MIG	F23, F24	PBS (Negative Control)

## Supplemental Figure 5.

The uncropped images of immunoblots shown in Figure 5A. The location of capture antibodies for assay controls and cytokines are indicated in the table.



## Supplemental Figure 6.

Analysis of neurological deficit in C57Bl/6 mice treated with IgG (n=16) or anti-TF antibody 1H1 at the dose of 25 mg/kg (n=9) and 75mg/kg (n=8). Representative brain sections stained with TTC are shown (viable brain tissue stains red, infarct remains white). Data (mean  $\pm$  SEM) were analyzed by 1-way ANOVA followed by Tukey's multiple comparison test. Asterisks above the bars indicate significance vs IgG group. \*P<0.05, \*\*P<0.01.



Uncut gel used in Figure 1