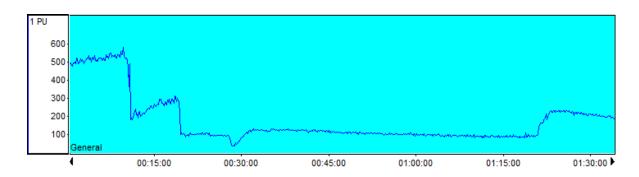
## **Supplemental Digital Content 1**

## General Analysis Report of Regional Cerebral Blood Flow

## **Trace**

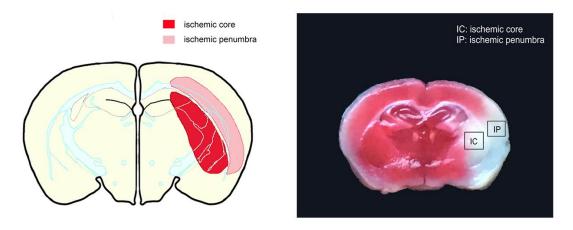


## **Calculations**

Item	1 PU
Mean value (Unit)	176.47
Standard Deviation (Unit)	131.53
Standard Error (Unit)	0.31
Maximum value (Unit)	585.18
Minimum value (Unit)	33.17
First value (Unit)	350.77
Last value (Unit)	178.65
Percent change first to last value (%)	-49.07
Area under curve (Unit*sec.)	992678.70
Slope (Unit/sec.)	-0.04
Duration (sec.)	5625.14
Relative start time (hh:mm:ss.fr)	00:00:23.89
Relative stop time (hh:mm:ss.fr)	01:34:09.04

Recording Auto Connected department of anesthesiology xijing hospital, Xi'an, China

Date/Time 2015/4/21



**Figure 1.** Schematic showing of the ischemic penumbra during middle cerebral artery occlusion (MCAO).

Time after I/R injury	Sacrificed animals	Dead animals
24h	5	2
7d	6	1

**Table 1.** N numbers of middle cerebral artery occlusion (MCAO) animals in experiment 1.

Infarct measurement	N numbers of animals	Excluded animals
MCAO	8	0
control-siRNA	8	0
TREM2-siRNA	6	2 (samples of brain tissue was damaged)

**Table 2.** Excluded data of 2,3,5-triphenyltetrazolium chloride staining in experiment 5.