Supplemental Information

Overexpression of circRNA circUCK2 Attenuates Cell Apoptosis in Cerebral Ischemia-Reperfusion Injury via miR-125b-5p/GDF11 Signaling

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Supplemental figure legends

Supplement Figure 1. Overexpression of circUCK2 reduced brain infarction in MCAO mice. (A) Brain infarct volume at 24 hours after MCAO, as measured in triphenylterazolium chloride-stained coronal sections. n = 5 mice per group. * P < 0.05. (B) Quantification of brain infarct volume presented in bar graphs.

Supplement Figure 2. Images (A) and bar graph (B) represent western blot analyses of Smad3 levels in HT-22 cells treated with circUCK2 mimics and a GDF11 inhibitor (FST) after OGD.
**Supplement Table 1 (Table S1). The primer sequences of circRNA and miRNA used in this study.**

**The primer sequences of gene-specific primers used for qRT-PCR:**

| Primer   | Sequence                        |
|----------|---------------------------------|
| circUCK2 Forward | 5′- ACGTGAGACATCTACAACCT -3′, |
| circUCK2 Reverse | 5′- TTCTGCTCCGAGGTAAGGAC -3′; |
| GAPDH Forward  | 5′- GGAGCGAGATCCCTCCAAAT -3′; |
| GAPDH Reverse  | 5′- GGCTGTTGTCATACCTCTCATGG -3′. |
| U6 Forward    | 5′- CTCGCTTCGGCAGCACA -3′; |
| U6 Reverse    | 5′- AACGCTTCACGAATTTGCGT -3′. |

**The primer Sequences of siRNA:**

| siRNA     | Sequence                        |
|-----------|---------------------------------|
| si-circUCK2 sense | UCUUAAACCGUGAUGUCCUGCUAAGTT; |
| si-circUCK2 antisense | AGAAUUUGGCACUACAGGACGAUGTT. |
| si-miR-125b-5p sense | CCUGAGUCACUACCUGUGACUATT. |
| si-miR-125b-5p antisense | GGACUCAGUGCAUGGACACUGAU. |

**The primer Sequences of miRNA-125b-5p:**

| miRNA     | Sequence                        |
|-----------|---------------------------------|
| miRNA-125b-5p Forward | 5′- GAAGATCTTCAGAGCAGCCCTCTCTCTCC -3′, |
| miRNA-125b-5p Reverse | 3′- CGGAATTCGGGAGTCCTGAGAAGGTCTC -5′. |
Supplement Figure 1. (Figure S1). Overexpression of circUCK2 reduced brain infarction in MCAO mice.
Supplement Figure 2. (Figure S2). Images (A) and bar graph (B) represent western blot analyses of Smad3 levels in HT-22 cells treated with circUCK2 mimics and a GDF11 inhibitor (FST) after OGD.