

Table S1. Relative primer sequences for siRNA of FBXO3 (rat)

Gene name	Primer sequences
si-231 (rat)	Forward: GGAAGAAUCAGUGCUGGAATT Reverse: UCCAGCACUGAUUCUUCCTT
si-857 (rat)	Forward: GCAACAACUGGAGAUUUUATT Reverse: UAAUAUCUCCAGUUGUUGCTT
si-1211 (rat)	Forward: CCACGAUCCAU AUGGCAUTT Reverse: AUGCCAUAUGGAAUCGUGGTT
NC (rat)	Forward: UUCUCCGAACGUGUCACGUTT Reverse: ACGUGACACGUUCGGAGAATT

Table S2. Relative primer sequences for siRNA of FBXO3 (mouse)

Gene name	Primer sequences
si-174 (mouse)	Forward: GCUAUGUUAGUCGAAGACUUATT Reverse: UAAGUCUUCGACUACAUAAGCTT
si-480 (mouse)	Forward: CGGAUGAUUAUCGCUGUUCAUTT Reverse: AUGAACAGCGAUAAUCAUCCGTT
si-1100 (mouse)	Forward: CCUGGAGUAGUCGGUGAAUUUTT Reverse: AAAUUCACCGACUACUCCAGGTT
NC (mouse)	Forward: UUCUCCGAACGUGUCACGUTT Reverse: ACGUGACACGUUCGGAGAATT

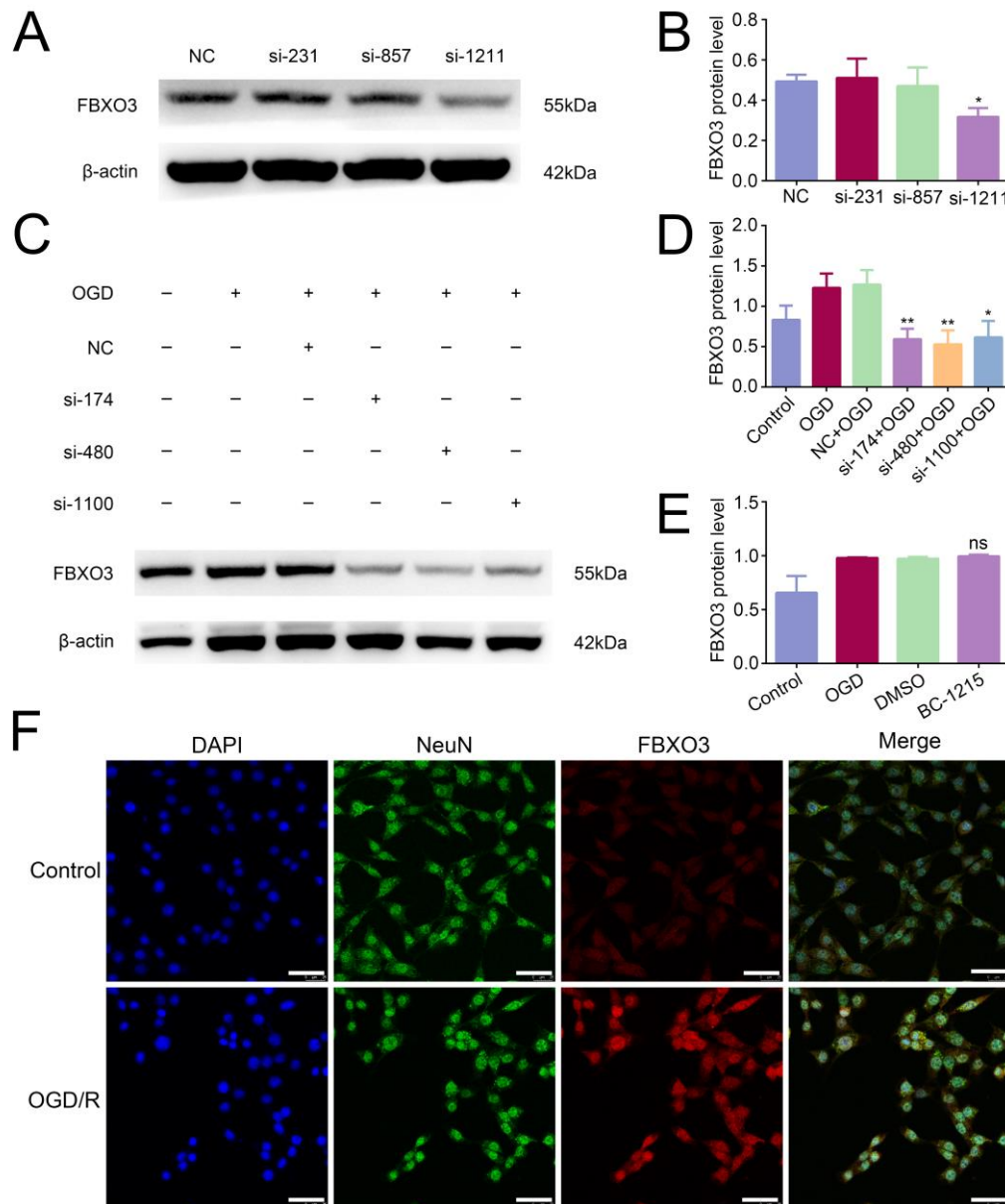


Figure S1. (A-B). Western blotting analysis of FBXO3 in the cortex of SD rats with different siRNA treatment. Si-1211 was chosen for relative experiments *in vivo* for its successful interference of FBXO3 protein expression. (C-D). Western blotting analysis of FBXO3 in HT22 cells at OGD 4 h/R 24 h with or without siRNA treatment. Si-480 was chosen for relative experiments *in vitro* for its successful interference of FBXO3 protein expression. (E). Analysis of FBXO3 protein level at OGD 4 h/R 24 h with DMSO or BC-1215 treatment. (F). IF colocalization of FBXO3 (red) along with NeuN (green) in HT22 cells with or without OGD/R treatment. Statistics for each group are expressed as mean \pm SD ($n \geq 6$). * $p < 0.05$, ** $p < 0.01$, vs. NC group or NC+OGD group.