

## Supplementary Information for

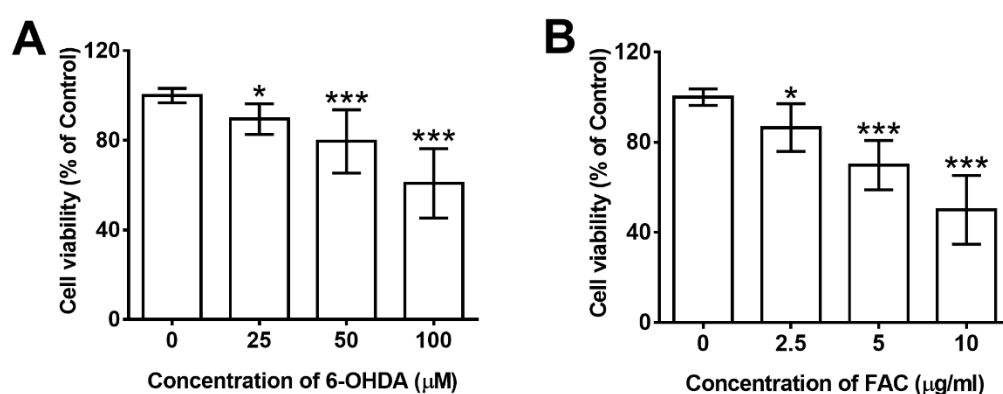
# The relationship between iron and LRRK2 in 6-OHDA-induced Parkinson's disease model

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This includes Supplementary text and Figures S1.

### 1. 6-OHDA and Ferric ammonium citrate decrease the viability of SH-SY5Y cells

SH-SY5Y cells were treated with the different concentrations of 6-OHDA or ferric ammonium citrate (FAC) for 24 h. Then, the cell viability was detected by MTT assay. It was found that 6-OHDA induced the decrease of cell viability to 90% of control at 25  $\mu$ M, 79% at 50  $\mu$ M and 61% at 100  $\mu$ M. FAC showed the similar trend to that of 6-OHDA. The cell viability also was gradually decreased with increase in FAC concentration, reached about 86% of control at 2.5  $\mu$ g/ml, 69% at 5  $\mu$ g/ml and 49% at 10  $\mu$ g/ml. These data suggest that 6-OHDA and FAC both can cause the damage of SH-SY5Y cells in a dose dependent manner, 100  $\mu$ M of 6-OHDA and 5  $\mu$ g/ml of FAC are chosen to use in subsequent experiments.



**Supplementary Figure S1.** 6-OHDA and FAC decreases the viability of SH-SY5Y cells. SH-SY5Y cells were treated with 6-OHDA (0, 25, 50, 100  $\mu$ M) or FAC (2.5, 5, 10  $\mu$ g/ml) for 24 h. (A) Cell viability after 6-OHDA treatment. (B) Cell viability after FAC treatment. \*P < 0.05, \*\*\*P < 0.001 (n = 10).