Figure S1. Effect of miR-148b-3p on the protein levels of COMT. (A) Western blotting results following transfection with the miR-148b-3p mimic demonstrated the effects on COMT expression. (B) Western blotting results following treatment with the miR-148b-3p inhibitor demonstrated the effects on COMT expression. (C) Quantification of western blotting results presented in (A). (D) Quantification of western blotting results presented in B.  $\beta$ -actin was used as an internal control in both experiments. Statistical analyses were performed on three independent sets of results. \*P<0.05. miR, microRNA; NC, negative control; COMT, catechol-O-methyltransferase.

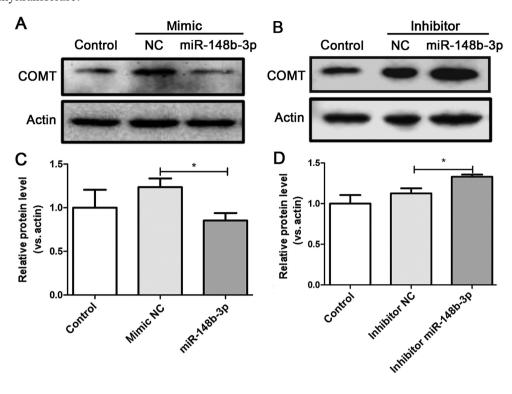


Figure S2. Effect of miR-148b-3p on the mRNA and protein expression levels of target genes in SK-N-BE(2) cells. (A) miR-148b-3p expression in SK-N-BE(2) cells. (B) *ZNF804A* expression in SK-N-BE(2) cells. (C) *COMT* expression in SK-N-BE(2) cells. (D) *PRSS16* expression in SK-N-BE(2) cells. (E) Effects of the miR-148b-3p mimic treatment on *ZNF804A* expression. (F) Quantification of western blotting results presented in (E). (G) Effects of the miR-148b-3p inhibitor treatment on *ZNF804A* expression. (H) Quantification of western blotting results presented in G. *GAPDH* was used as an internal control in western blotting experiments. Statistical analyses were performed on three independent results. \*P<0.05, \*\*P<0.01, \*\*\*\*\*P<0.0001. miR/miRNA, microRNA; *ZNF804A*, zinc finger protein 804A; NC, negative control; *COMT*, catechol-*O*-methyltransferase; *PRSS16*, serine protease 16.

