



**Figure S1.** Transplanted wild-type hESC EBCs did not survive in the *substantia nigra*. Representative photomicrographs of H&E-stained brain slices from **A, E** Untreated at 7 dpt, **B, F** Sham at 7 dpt, **C, G, D, H** 6-OHDA-lesioned animals at 7 dpt (**C, G**) and 15 dpt (**D, H**) transplanted with wild-type hESC EBCs. **A, B, C, D** show the grafted area with cavitations surrounded by compacted cell clusters and a yellow pigment, characteristic of cell debris in H&E. The yellow rectangles in **A, B, C, D** represent the enlargement zones in **E, F, G, H** respectively. **E, F, G, H** allow us to appreciate the morphology of the cells, the white arrowheads point to the undamaged morphology of endogenous cells, whereas the yellow arrowheads indicate compacted cell clusters and damaged cells with aberrant nuclear morphology. A yellow pigment, characteristic of cell death, is observed in this same area. Magnifications for **A, B** are 10x; for **E, F**, are 40x; for **C, D** are 20x; and for **G, H** are 100x. dpt: days post-transplantation; EBCs: embryoid body cells; hESC: human embryonic stem cells; 6-OHDA: 6-hydroxydopamine.