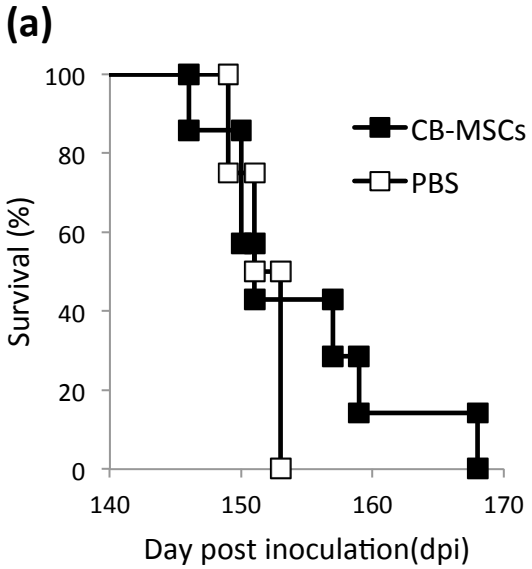
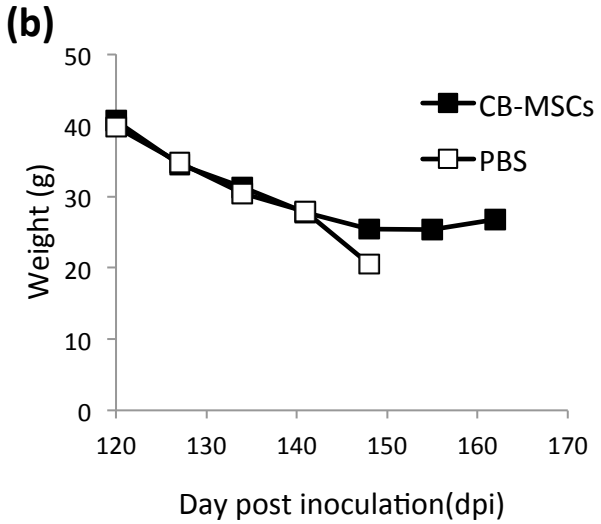


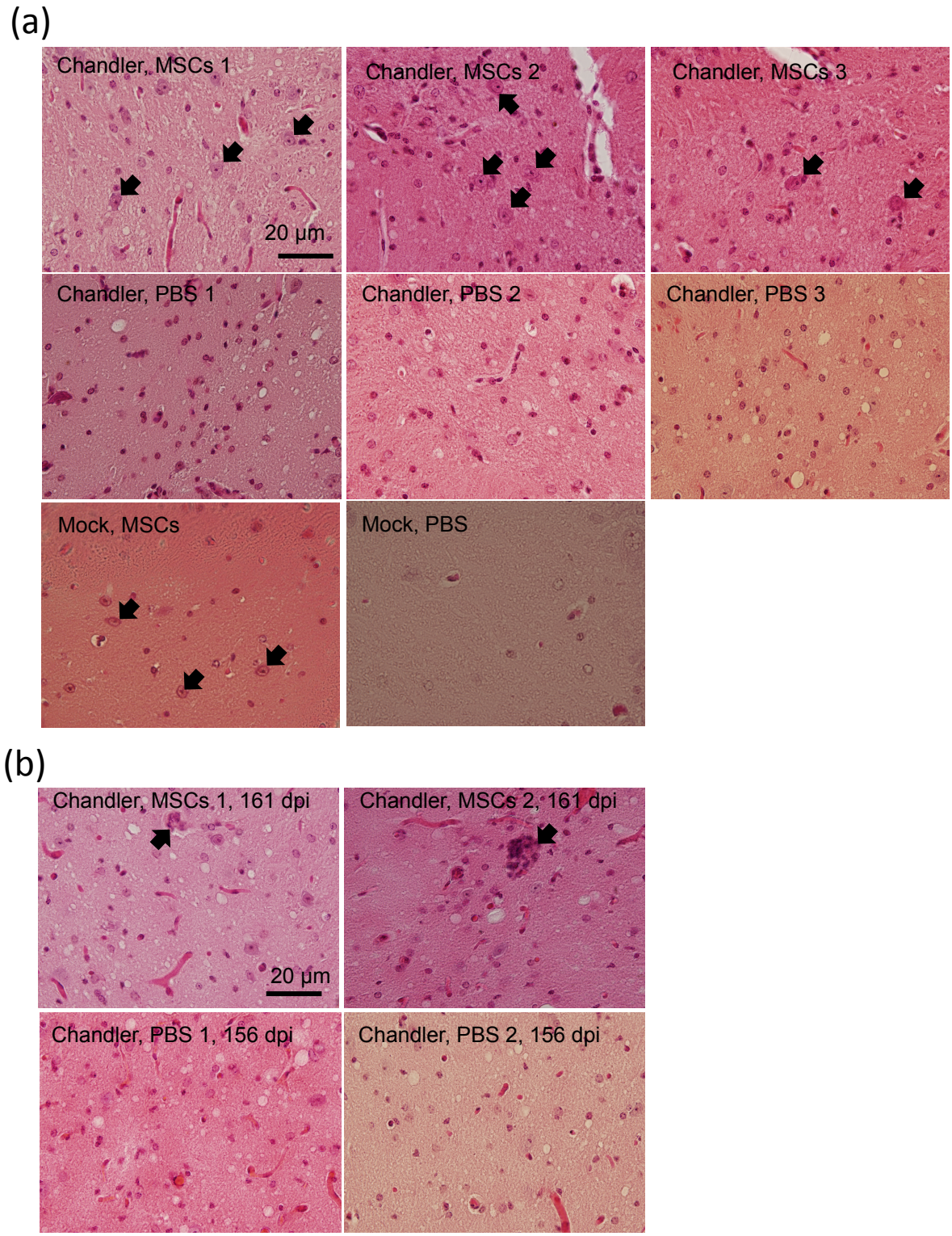
Intra-hippocampus transplantation	n	Survival time (days)	Mean ± SD
CB-MSCs	7	146, 150, 150, 151, 157, 159, 168	154.4 ± 7.5
PBS	4	149, 151, 153, 153	151.5 ± 1.9



Supplementary figure 1. Effect of CB-MSCs on the survival of mice infected with the Obihiro prion strain

(a) Survival curves and survival periods for individual mice. CB-MSCs (1×10^5 cells in 2 μl PBS) were transplanted into Obihiro strain-infected mice at 120 dpi CB-MSCs(n = 7, closed square). As a sham-operation group, the same volume of PBS was injected into the hippocampus of Obihiro strain-infected mice at 120 dpi (PBS, n = 4, open square). The X-axis indicates the survival time after prion inoculation, and the Y-axis indicates the survival rate (%). The table on the right shows the survival times for individual mice in each group.

(b) Changes in body weight. After the transplantation of CB-MSCs, mice were weighed weekly up to the terminal stage of the disease.



Supplementary figure 2. Presence of CB-MSCs in the transplanted side of hippocampus.

(a) HE staining of the transplanted side of hippocampi. Mice were sacrificed at 145 dpi.
Arrows indicate large cells with abundant pale cytoplasm which are observed only in CB-MSC-transplanted mice.
Note that microglia and astrocytes are activated in the Chandler strain-infected mice.

(b) HE staining of the transplanted side of hippocampi. Terminal stage.
Arrows indicate aggregate of necrotic cells which are observed only in CB-MSC-transplanted mice.

Chandler, MSC: Chandler strain-infected mice with CB-MSC transplantation (three in (a) and two in (b))
Chandler, PBS: Chandler strain-infected mice with sham operation (three in (a) and two in (b))
Mock, MSCs: Mock-infected mice with CB-MSC transplantation (one mice in (a))
Mock, PBS: Mock-infected mice with sham operation (one mice in (a))