Table S1. Surface antigenicity MSCs/LacZ and MSCs/Ngn1

Marker	MSCs/LacZ	MSCs/Ngn1
STRO-1	4.7	5.1
HLA-ABC	99.4	99.4
CD90	70.6	83
CD34	1.2	1.1
CD45	11.8	5.4
CD105	61.1	91.5
HLA-DR	0.03	1.1
CD-11b	4	3.5
CD-29	99.9	99.9
CD49a	85.1	89.8
CD73	99.9	99.9
CD117	1.5	1.8
CD140b	15.2	22.7

Flow cytometric analysis shows various surface marker expression by MSCs/LacZ and MSCs/Ngn1 cells. Data are presented as % of total counted cells.

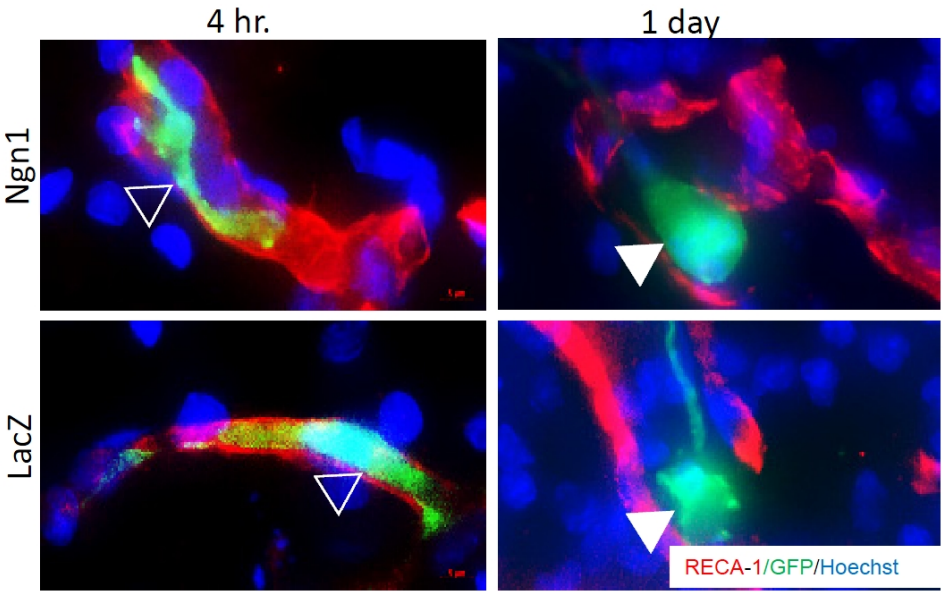

Fig. S1. Extravasation of GFP+ MSCs from blood vessels. Double immunohistochemistry reveals GFP-immunoreactivity within the vascular lumen (RECA-1) at 4 hrs (blank arrowheads). At 1 day after transplantation, extravasated GFP+cells were found in the perivascular area (white arrowheads).

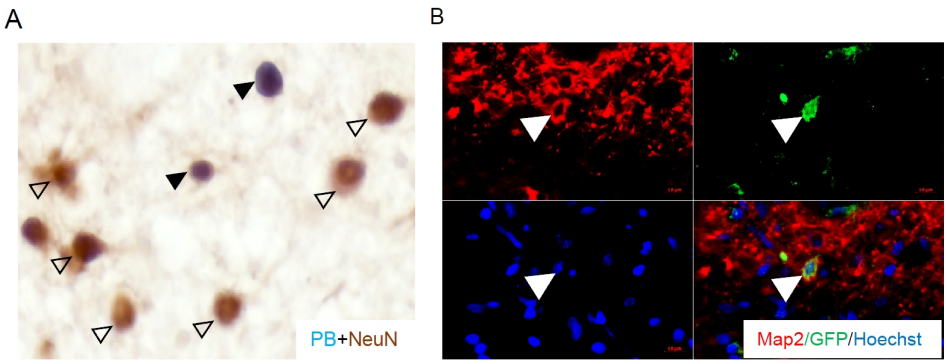

Fig. S2. In vivo differentiation of grafted MSCs/Ngn1 cells in the ischemic brain at 28 days after ischemia. (A) Light microscopy reveals the grafted MSCs/Ngn1 cells in Prussian blue staining, which are colocalized with NeuN-immunoreactivity (black arrowheads). Prussian blue-negative neuronal cells are marked (blank arrowheads). (B) Double immunofluorescence microscopy reveals differentiation of GFP-labeled MSCs/Ngn1 cells into MAP2+ neuronal cells (white arrowheads).