

SUPPLEMENTARY INFORMATION

Supplementary Figure Legends

Supplementary Fig. 1

CD133 expressions under the same hypoxic conditions in the U251 glioma cell line compared with WiDr, OCUM1, 44As3 and DLD-1 cell lines. The experiments were performed in triplicate. CD133 expressions of all cell lines including the WiDr, IM95, SNU16, OCUM1, 44As3 and DLD-1 cells were reproducibly down-regulated by hypoxic condition (Supplemental Fig. 1, Fig. 3B). But, we could not detect any changes in the U251 glioma cells and the regulation of CD133 in the U251 cells seemed to be unique.

Supplementary Fig. 2

CD133 expression changes under the rapamycin-exposure and induction of HIF-1alpha by DFO-exposure or hypoxia in CD133 low-expressing cell lines. The experiments were performed in triplicate. Up-regulation of CD133 expression by rapamycin was reproducibly observed in the WiDr cells (positive control), but not in CD133 low-expressing cell lines (Supplemental Fig. 2, upper panels).

Under the DFO-exposure (induction of HIF-1alpha), CD133 expression was down-regulated in all CD133 low-expressing cell lines (Supplemental Fig. 2, lower panels), which is consistent with the results of high-expressing cells (Figure 3C,3D). In addition, under the hypoxic condition (induction of HIF-1alpha), similar results were obtained in these cell lines (Supplemental Fig. 1, Fig 3B).

Taken together, down-regulation of CD133 by DFO and by hypoxia was observed in the WiDr, IM95 SNU16, OCUM1, DLD-1 and 44AS3 cells. It seemed to be independent of intrinsic CD133 expression levels.