

Supplementary Figure S1. Doublecortin staining (DCX, red) was detected in three out of four animals one week post-implantation (a-c, d-f). Doublecortin (DCX) is a microtubule-associated protein expressed in migrating neuronal precursors, but may also be associated with mature astrocytes. DCX has been observed during glial scar formation following traumatic brain injury, with peak expression occurring at 1 week post-injury (Francis, Koulakoff et al. 1999; Itoh, Satou et al. 2007). Tissue was also labeled with NeuN (mature neuronal nuclei, green) and Hoechst (nuclear counterstain, blue). Expression appeared enhanced in NSC-seeded (a-c) probes compared to controls from the same animal (probe only, d-f). No staining was observed in the remaining animals. The origin and function of DCX-expressing cells are yet to be elucidated, and could possibly indicate a regenerative capacity of the injured brain, the grafted cells, or a combination of both. Scale = 50 microns.