



**SUPPLEMENTARY FIG. S3.** Transplanted NC cells localize specifically to NC locations in the chicken embryo. (**A–F**) Cross section of the chicken ascending aorta where fluorescent human NC cells were detected (*arrowheads*); (**B, E**) human cells identified by their bright and distinct Hoechst 33342 staining (*arrowheads*); (**C, F**) the human NC cells also expressed ACTA2 (*arrowheads*); (**G**) fluorescent human NC cells were seen in the cerebral cortex (parietal lobe) of chicken at HH stage 32 (*arrowheads*); (**H**) human cells identified by distinct Hoechst 33342 staining; (**I**) GFP<sup>+</sup> human NC cells identified in perivascular locations within a network of blood vessels (lectin stained) and within the cerebrum of chicken embryos; (**J**) GFP<sup>+</sup> human NC cells deposited in the cortex (frontal lobe) by blood vessels in the brain (identified by lectin); (**K**) myocardial and overlying epicardial (*arrow*) regions of the chicken embryo heart with no evidence of GFP<sup>+</sup> human NC cells. *White* scale bar: 100  $\mu$ m, *blue* scale bar: 50  $\mu$ m. Epi, epicardium; Myo, myocardium.