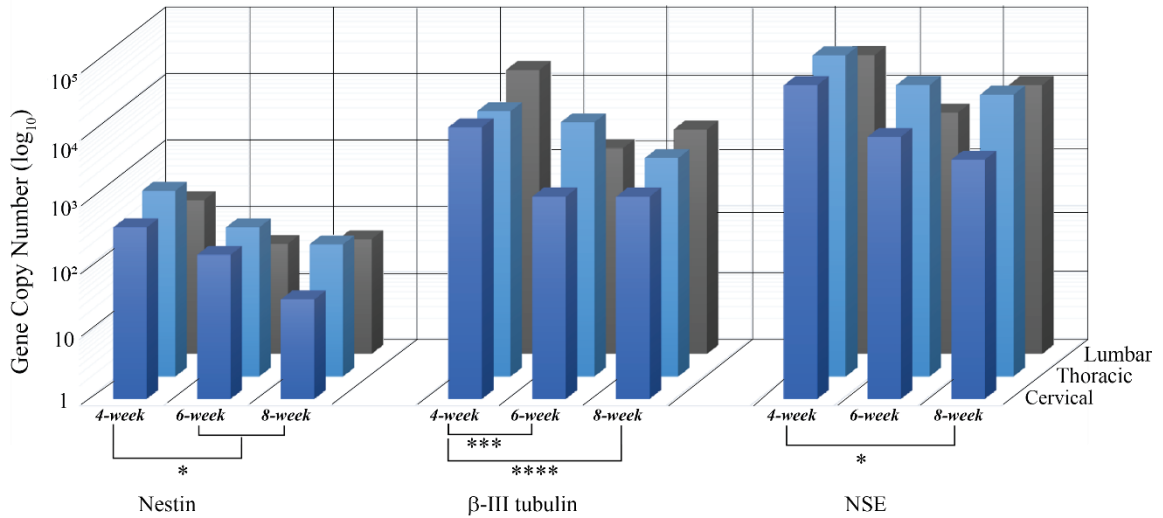
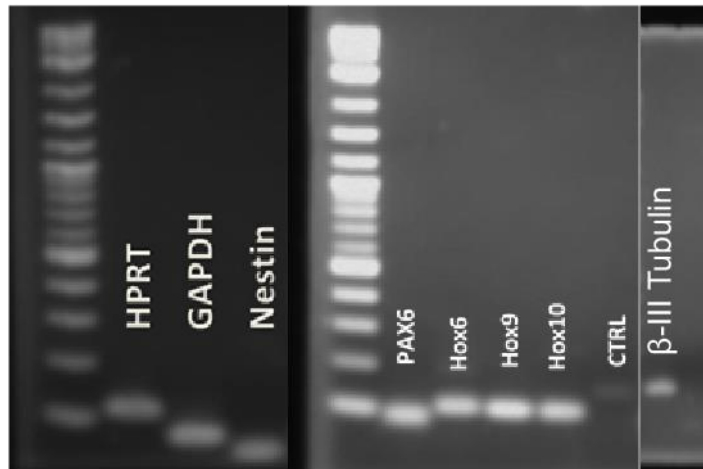


**Supplementary Materials:**



**Supplemental Figure 1.** aNSCs preferentially mature by 4 weeks as evident by gene expression. qPCR absolute quantification analysis of different genes from three different regions at each timepoint. Nestin expression was significantly different at 4 weeks as compared 6 and 8 weeks ( $p < 0.05$ ). β-III tubulin expression significantly decreased with longer implantation time as indicated by asterisks (asterisk represents significant difference as follow \*  $p < 0.05$ , \*\*\*  $p < 0.0001$ , \*\*\*\*  $p < 0.00001$ ). To the right, the figure shows significant differences in NSE expression between 4 and 8 weeks ( $p < 0.05$ ). Significance by two-way ANOVA, followed by post hoc Tukey HSD test. Mean with  $n = 3$ .



**Supplemental Figure 2.** Single PCR products were confirmed before cloning. Gel electrophoresis for conventional PCR products confirming that our target genes were amplified as a single product before starting cloning of these product.

**Supplemental Table 1.** Primer sets for genes used to characterize NSCs differentiation using absolute quantification.

<i>Gene</i>	<b>Forward Primer (5' – 3')</b>	<b>Reverse Primer (5' – 3')</b>
<i>GAPDH</i>	AGC TCA TTT CCT GGT ATG ACA A	TAC TCC TTG GAG GCC ATG TA
<i>HPRT</i>	CTC ATG GAC TGA TTA TGG ACA GGA C	GCA GGT CAG CAA AGA ACT TAT AGC C
<i>β-III tubulin</i>	ACT TTA TCT TCG GTC AGA GTC	CTC ACG ACA TCC AGG ACT GA
<i>Nestin</i>	GGC TAC ATA CAG GAC TCT G	AAC CTC GTC CAG GTG TCT G
<i>PAX6</i>	GAA CTT GGA CGG GAA CTG AC	CAA ACA CAC ATG AAC AGT CAG C
<i>NSE</i>	GAG AAC AGC GAA GCT TTG G	AGC CAC ATC CAT ACC AAT CA
<i>Nanog</i>	CAA TGG ATG CTG GGA TAC TCC	TTC TGA ACC TGA GCT ATA AGC AG