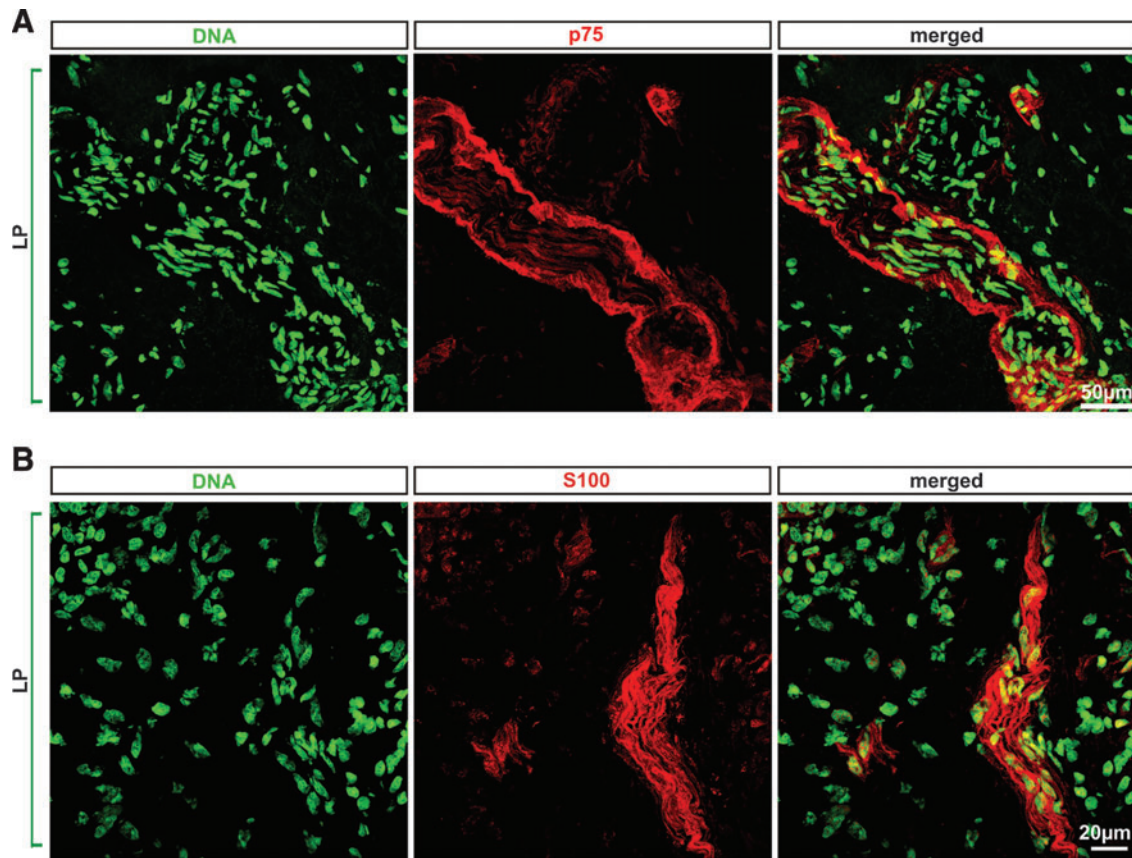
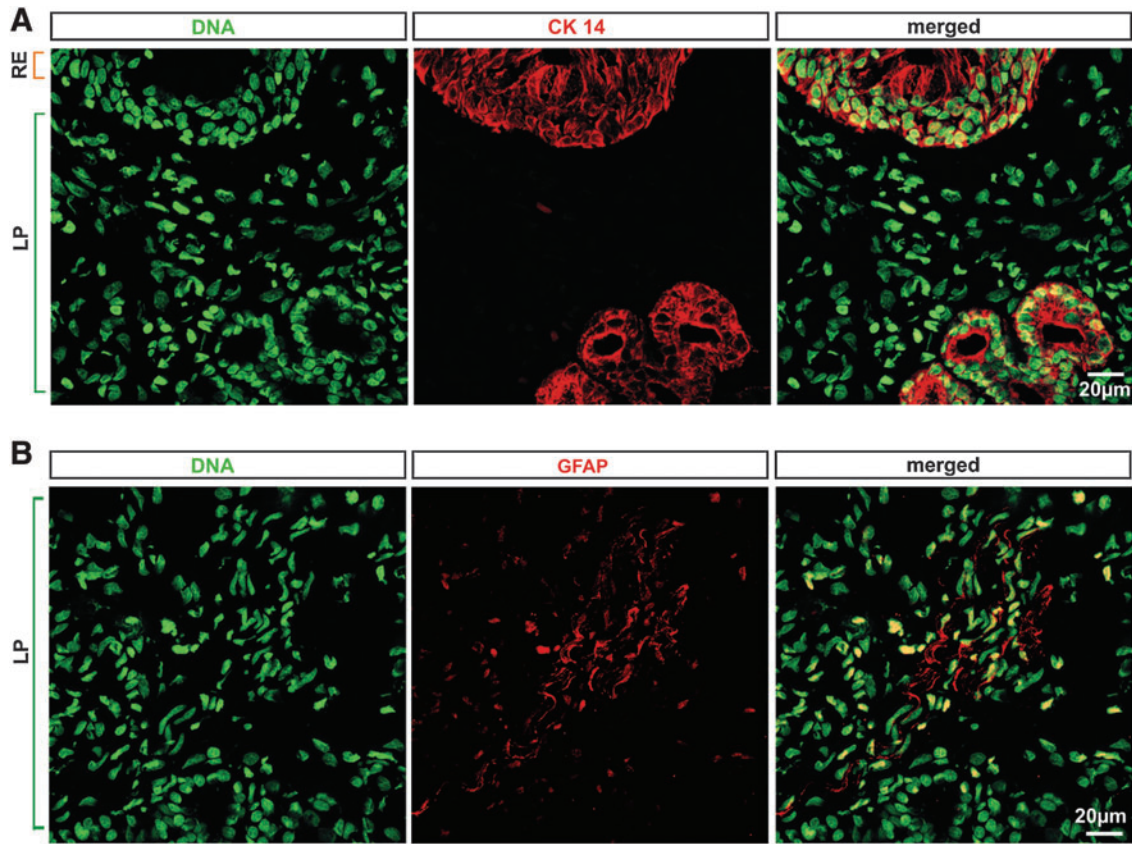


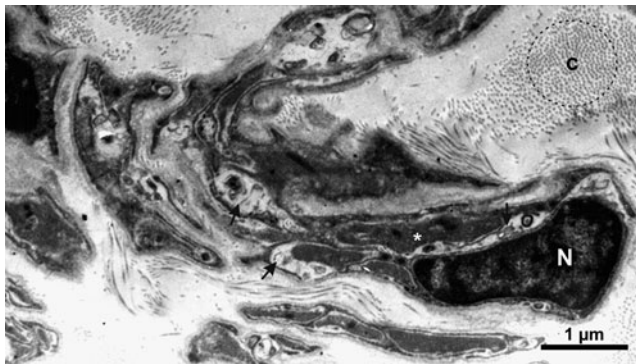
## Supplementary Data



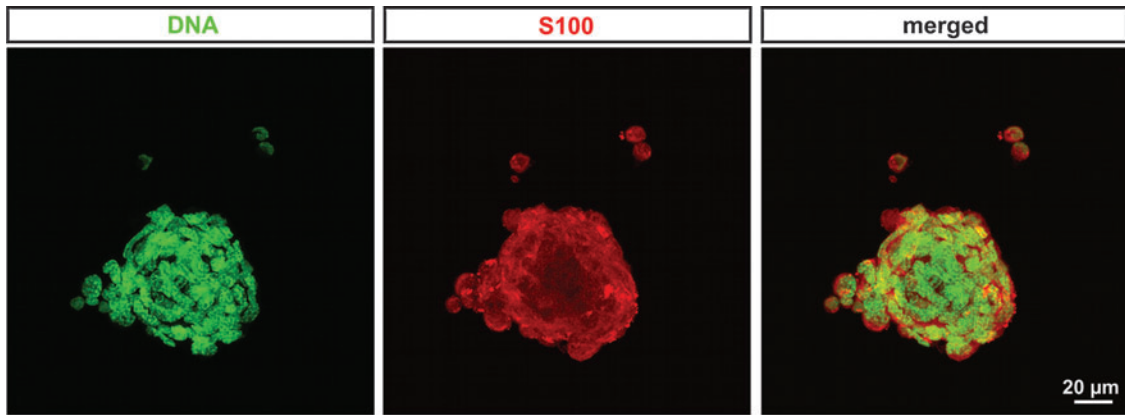
**SUPPLEMENTARY FIG. S1.** Immunocytochemical stainings of sections against the neural crest marker p75<sup>NTR</sup> and S100. **(A, B)** p75<sup>NTR+</sup> and S100<sup>+</sup> cells were exclusively observable within the lamina propria (LP). Binding of primary antibodies was visualised by appropriate secondary fluorochrome-coupled antibodies (*red*). Nuclei were stained with SYTOX Green. Scale bar: A = 20  $\mu$ m/B = 50  $\mu$ m.



**SUPPLEMENTARY FIG. S2.** Immunocytochemical stainings of sections against the epithelial marker cytokeratin 14 (CK 14) and the intermediate filament glial fibrillary acidic protein (GFAP). **(A)** CK 14 expression (*red*) was detected in basal cells within the epithelial layer (RE) and in glands within the LP. Scale bar: 20 μm. **(B)** GFAP-positive cells (*red*) were exclusively detected within the LP and not in the RE. Nuclei were stained with SYTOX Green. Scale bar: 20 μm.

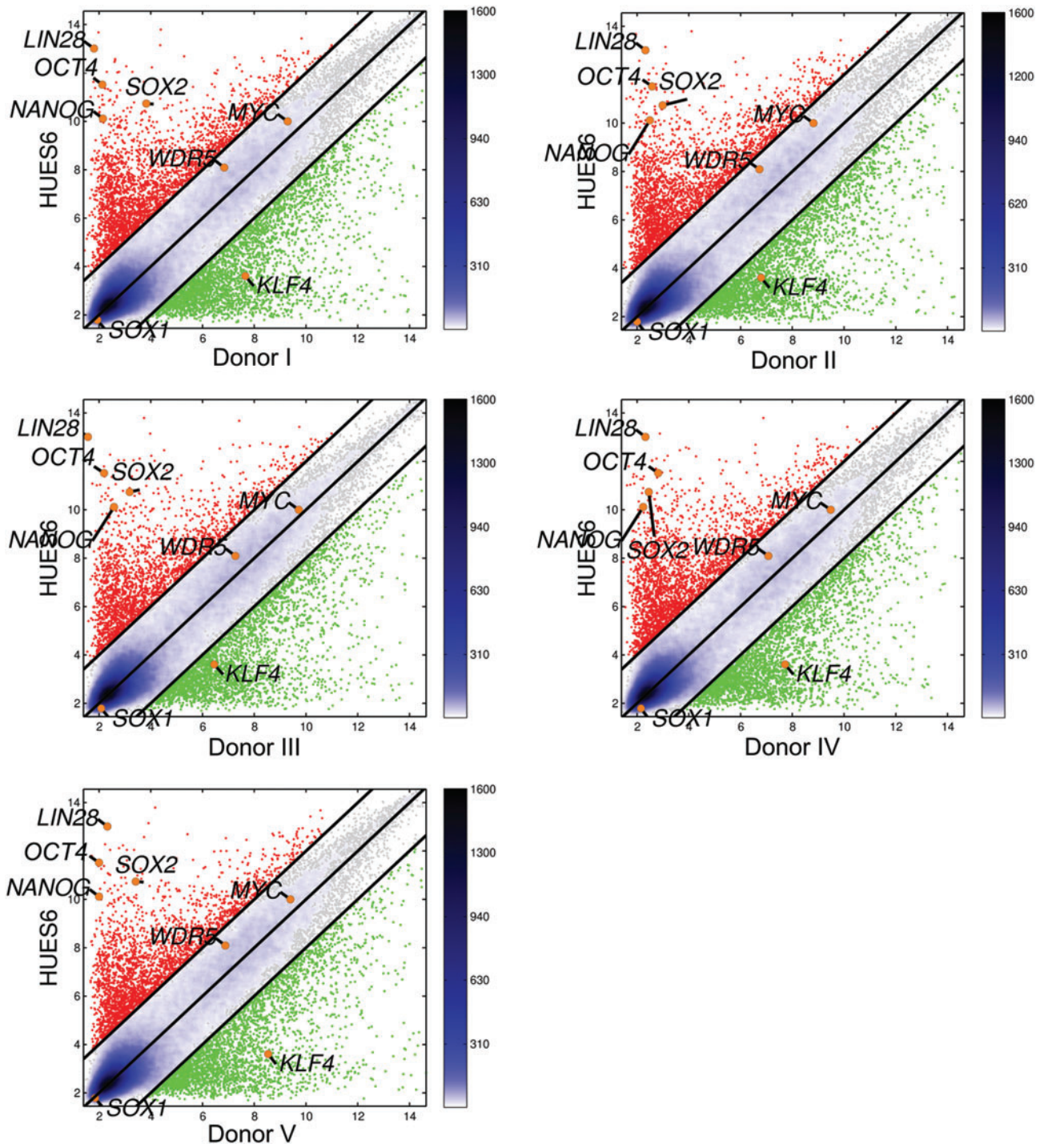


**SUPPLEMENTARY FIG. S3.** Isotype control of transmission electron microscopy of nanogold silver-intensified particles. Only irregularly dispersed particles were visible. Nerve fibers and collagen fibers (c) were detectable. Arrows indicating axons closely related to nonmyelinating Schwann cells (*asterisk*). N = nucleus. Scale bar: 1 μm.

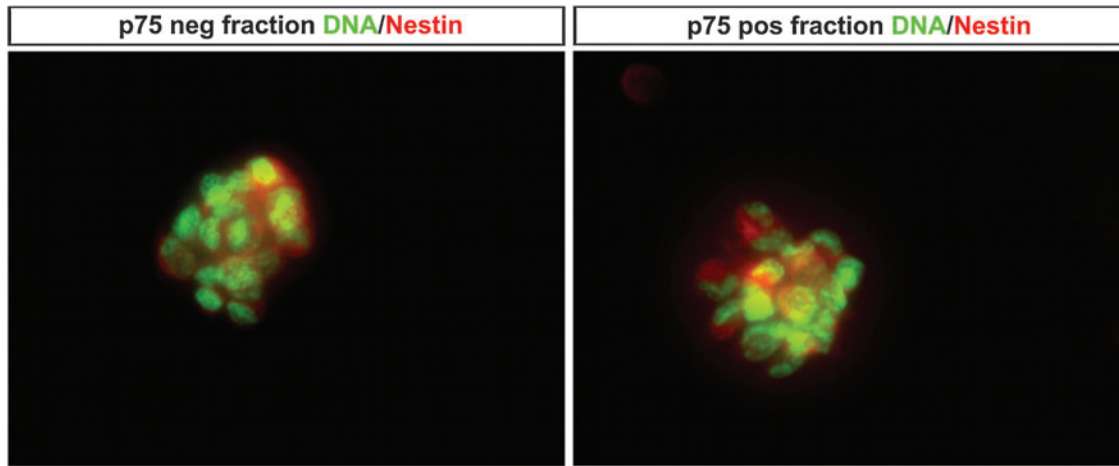


**SUPPLEMENTARY FIG. S4.** Immunocytochemical staining of neurospheres against S100 (*red*), showed its expression in almost all cells within a neurosphere. Nuclei were stained with SYTOX *Green*. Scale bar: 20μm.

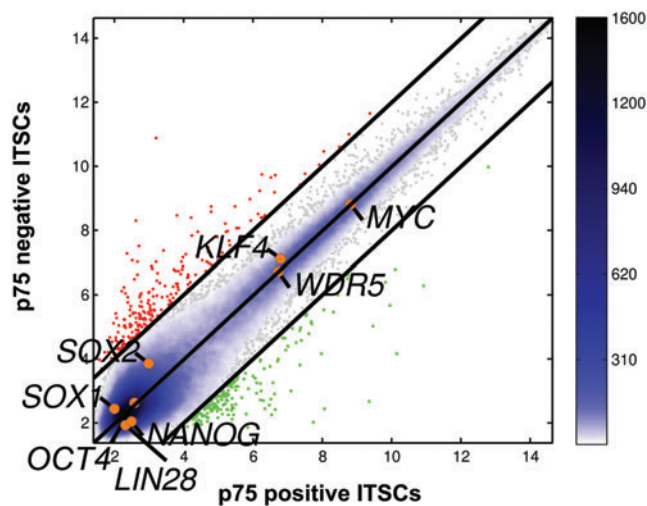




**SUPPLEMENTARY FIG. S5.** Microarray scatter plots of 5 different ITSCs donors compared with HUES6. All 5 donors showing comparable expression patterns of pluripotency associated genes. WDR5, KLF4, and c-MYC were expressed at least at the same level compared to hESCs, while OCT4, SOX2, LIN28, and NANOG were lower expressed. ITSCs, inferior turbinate stem cells.



**SUPPLEMENTARY FIG. S6.** Immunocytochemical staining of p75<sup>+</sup> and p75<sup>-</sup> sorted neurospheres against nestin. Nestin expression was detectable in both fractions, demonstrating a neural crest-related stem cell population. Nuclei were stained with SYTOX Green.



**SUPPLEMENTARY FIG. S7.** Whole genome comparison between p75<sup>+</sup> and p75<sup>-</sup> sorted ITSCs. No differences in the expression of pluripotency associated genes was detectable. ~400 genes in the p75<sup>+</sup> sorted cells were up- or down-regulated compared with p75<sup>-</sup> sorted cells.

SUPPLEMENTARY TABLE S1. PRIMER SEQUENCES  
USED FOR THE PCR-ANALYSIS

<i>Target</i>	<i>Sequence (5'-3')</i>
ABCG2	caaaaactgctgggtaatc
Rev-ABCG2	acagaaccacactctgacc
$\beta$ -Actin	gagaagatgaccagatcatgt
Rev- $\beta$ -Actin	catctctgctcgaagtcag
AMPA1	ggcgataattcaagtgtca
Rev-AMPA1	ggctccgtattttccatcac
CD133	caccgctctagatactgctgtga
Rev-CD133	tgatggaccatggacataaacgtg
c-Myc	aggagacatggtaaccagagt
Rev-c-Myc	agcctgcctctttccacagaac
CNPase	ggcagaggagtacgtcaac
Rev-CNPase	aggtttgctttcccgtagt
GABA transporter	cagtgaggatgtccttctct
rev- GABA transporter	caggggtcatgatcatccag
Klf4	tctcaattcgctgaccatcct
Rev-Klf4	ttcagcacgaactgcccacatca
Nanog	tgcttattcaggacagccct
Rev-Nanog	tctggtcttctgttcttgact
Nestin	cagcgttggacagaggttg
Rev-Nestin	gctggcacaggtgtctcaag
NMDA1	gctcctcgagaaggagaaca
Rev-NMDA1	gccattgtagatgccactt
Oct4A	tcccttcgcaagccctcat
Rev-Oct4A	tgatgtctctgggactcctc
Oct4A/B	ctcctgaagcagaaggatcac
Rev-Oct4A/B	cttctggcgccggttacagaaca
p75/CD271	tgagtgtgcaaagcctgcaa
Rev-p75/CD271	tctcatcctggtagtagccgt
Slug	caactacagcgaactggacacaca
Rev-Slug	aaagccttgccacagatcttgc
Sox2	tgcagtacaactccatgacca
Rev-Sox2	gtgctgggacatgtgaagtct
Sox9	tgaagaaggagagcgaggaa
Rev-Sox9	ggggctgggtacttgaatcg
Sox10	aggagaaggaggttgactgt
Rev-Sox10	tcctcaaagctactctcagc
Synaptophysin	tgtagtctggctcagtgaaacc
Rev-Synaptophysin	gcagggctcagacagataaa
$\beta$ -III-tubulin	cattctgggtggacctggaac
Rev- $\beta$ -III-tubulin	tcgcagttttcacactccttc