

Table S1. List of the primers used in this study

Purpose	Gene	Forward Primer (5' to 3')	Reverse Primer (5' to 3')
Quantifying gene expression	<i>MAP2</i>	CGAAGCGCCAATGGATTCC	TGAACTATCCTTGCAGACACCT
	<i>NEUN</i>	CCCATCCCGACTTACGGAG	GCTGAGCGTATCTGTAGGCT
	<i>GRIA2</i>	CACCCCACATCGACAATTTGG	GACGTGGAGTGTCCGCAA
	<i>GRIN1</i>	ACCCAAGATCGTCAACATTG	GGCTAACTAGGATGGCGTAGA
	<i>SYNAPSIN1</i>	AGTTCTTCGGAATGGGGTGAA	CAAAGTCCGGTAGTCTCCGTT
	<i>S100B</i>	TGGCCCTCATCGACGTTTTTC	ATGTTCAAAGAAGTCTGGCA
	<i>GAPDH</i>	TGCACCACCAACTGCTTAGC	GGCATGGACTGTGGTCATGAG
Mutation analysis	<i>LRRK2</i>	CTTTAAGGGACAAAGTGAGCACAGA	CTCACAAGTGCCAAACAATACCTAGA
Mycoplasma detection	16S and 23S rRNA spacer region of <i>Mycoplasma</i> and <i>Acholeplasma</i>	*ACACCATGGGAGYTGGTAAT	*CTTCWTCGACTTYCAGACCCAAGGCAT
		*AAAGTGGGCAATACCCAACGC	*TCACGCTTAGATGCTTTCAGCG
		**GTGSGGMTGGATCACCTCCT	**GCATCCACCAWAWACYCTT
			**CCTACTGTGCCCCTTGTTCCT

*Primers for the first round PCR of mycoplasma detection analysis. **Primers for the second round PCR of mycoplasma detection analysis.

Table S2. List of antibodies used in this study

Antibody	Dilution	Supplier (Catalog number)
Rabbit anti-TH	1 : 1000	Millipore (#AB152)
Mouse anti-TUJ1	1 : 5000	BioLegend (#801201)
Chicken anti-MAP2	1 : 5000	Abcam (#ab5392)
Rabbit anti-SYNAPSIN-I	1 : 2000	Millipore (#AB1543)
Rabbit anti-PAX6	1 : 500	BioLegend (#901301)
Mouse anti-Ki-67	1 : 500	BD (#556003)
Rabbit anti-N-CADHERIN	1 : 200	SantaCruz (#sc-7939)
Mouse anti-PLZF	1 : 100	Abcam (#ab104854)
Rabbit anti-ZO1	1 : 50	Invitrogen (#61-7300)
Rabbit anti-GFAP	1 : 500	Dako (#Z0334)
Rabbit anti-Cleaved CASP3	1 : 500	Cell signaling (#9661)
Mouse anti-GAPDH	1 : 5000	SantaCruz (#sc-47724)

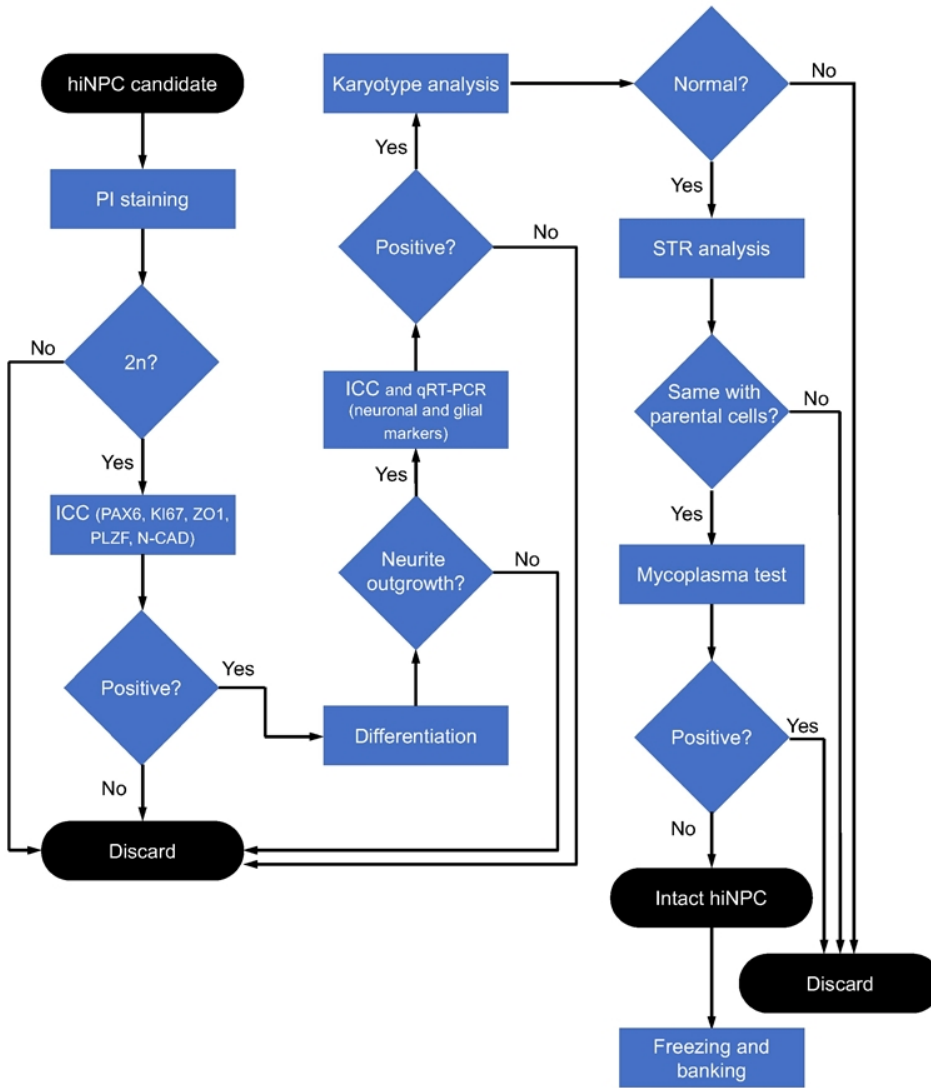


Fig. S1. Flowchart for the step-wise characterization of hiNPC candidates.