

Supplementary Information

Supplementary Table 1. List of fluorochrome-conjugated antibodies used to detect stem cells.

Name (clone)	Type	Manufacturer
Anti-CXCR4 antibody (12G5)	R-PE-conjugated, mouse IgG2a, kappa	Biolegend (San Diego, CA, USA)
Anti-KIT antibody (104D2)	R-PE-conjugated, mouse IgG1, kappa	Biolegend (San Diego, CA, USA)
Mouse IgG1 kappa (MOPC-21)	R-PE-conjugated	Biolegend (San Diego, CA, USA)
Mouse IgG2a kappa (MOPC-173)	R-PE-conjugated	Biolegend (San Diego, CA, USA)
Mouse IgG2b kappa (MPC-11)	R-PE-conjugated	Biolegend (San Diego, CA, USA)

CXCR4, C-X-C chemokine receptor type 4; IgG, immunoglobulin G; R-PE: R-phycoerythrin.

Supplementary Table 2. Primary antibodies used for immunohistochemistry.

Name (clone)	Type	Manufacturer	Catalogue no.
Anti-CD3	Rabbit IgG	Abcam (Cambridge, UK)	ab5690
Anti-ETBR	Rabbit IgG	LifeSpan BioSciences (Seattle, WA, USA)	LS-A54
Anti-F4/80 (BM8)	Mouse IgG2b, kappa	Thermo Fisher Scientific, (Waltham, MA, USA)	14-4801
Anti-HuC/HuD (16A11)	Mouse IgG2b, kappa	Thermo Fisher Scientific, (Waltham, MA, USA)	A-21271
Anti-KIT	Rabbit IgG	Agilent (Santa Clara, CA, USA)	A4502
Anti-mitochondria, human (113-1)	Mouse IgG1	Abcam (Cambridge, UK)	113-1
Anti-NFM antibody (RMO-270)	Mouse IgG2b, kappa	Thermo Fisher Scientific, (Waltham, MA, USA)	13-0700
Anti-SFD1 antibody	Rabbit IgG	Abcam (Cambridge, UK)	ab25117
Mouse IgG1 kappa (MOPC-21)	Mouse IgG1, kappa	Biolegend (San Diego, CA, USA)	400111
Mouse IgG2b kappa (MPC-11)	Mouse IgG2b, kappa	Biolegend (San Diego, CA, USA)	400319
Rabbit IgG	Rabbit IgG	Biolegend (San Diego, CA, USA)	410404

ETBR, endothelin receptor type B; IgG, immunoglobulin G; NFM, neurofilament M; SFD1, stromal cell-derived factor-1.

Supplementary Table 3. List of commercially available kits used for enzyme-linked immunosorbent assays.

Target protein	Product	Manufacturer	Catalogue no.
Albumin, mouse	Mouse Albumin ELISA Quantitation Kit	Bethyl Laboratories (Montgomery, TX, USA)	E90/99-134
DAO, mouse	IDK DAO ELISA	Immundiagnostik AG (Bensheim, Germany)	K8500
Endotoxin	Limulus Amebocyte Lysate Chromogenic Endpoint Assay	Hycult Biotech (Uden, Netherlands)	HIT302
GDNF, human	GDNF Human ELISA Kit	Abcam (Cambridge, UK)	ab100525
GDNF, mouse	GDNF Mouse ELISA Kit	Abcam (Cambridge, UK)	ab171178
KIT, human	Quantikine ELISA Human CD117/c-kit Immunoassay	R&D Systems (Minneapolis, MN, USA)	DSCR00
KIT, mouse	c-Kit (CD117) Mouse SimpleStep ELISA Kit	Abcam (Cambridge, UK)	ab203361
NGF, human	Human nerve growth factor (NGF) ELISA Kit	Cusabio (Houston, TX, USA)	CSB-E04683h
NGF, mouse	Mouse nerve growth factor (NGF) ELISA Kit	Cusabio (Houston, TX, USA)	CSB-E04684m
SCF, human	Quantikine ELISA Human SCF Immunoassay	R&D Systems (Minneapolis, MN, USA)	DCK00
SCF, mouse	Quantikine ELISA Mouse SCF Immunoassay	R&D Systems (Minneapolis, MN, USA)	MCK00
SDF1 α , mouse	Quantikine ELISA Mouse CXCL12/SDF-1 α Immunoassay	R&D Systems (Minneapolis, MN, USA)	MCX120
SP-D, mouse	Quantikine ELISA Mouse SP-D Immunoassay	R&D Systems (Minneapolis, MN, USA)	MSFPDO

DAO, diamine oxidase; GDNF, glial cell-derived neurotrophic factor; NGF, nerve growth factor; SCF, stem cell factor; SDF1 α , stromal cell-derived factor 1 α ; SP-D, surfactant protein D.

Supplementary Table 4. List of TaqMan probes for mouse genes used for RT-qPCR.

Symbol	Name	ID number
<i>Ednrb</i>	Endothelin receptor type B	Mm00432989_m1
<i>Gapdh</i>	Glyceraldehyde 3-phosphate dehydrogenase	Mm99999915_g1
<i>Kit</i>	Kit oncogene (CD117)	Mm00445212_m1

Supplementary Table 5. List of TaqMan probes to human genes used for RT-qPCR.

Symbol	Name	ID number
ACAN	Aggrecan	Hs00153936_m1
BGLAP	Bone gamma-carboxyglutamate protein	Hs01587814_g1
LPL	Lipoprotein lipase	Hs00173425_m1
PPARG	Peroxisome proliferator-activated receptor-gamma	Hs0115513_m1
RUNX2	Runt-related transcription factor-2	Hs00231692_m1
SOX9	SRY-box 9	Hs01001343_g1
18S	Eukaryotic 18S ribosomal RNA	Hs99999901_s1