

Table S1.

Cell Type	Cell Treatment	# of colony found
Jeko	Control	51 (30/15/6)
	SDF-1 only	116 (38/52/26)
	AMD3100 and SDF-1	71 (37/12/22)
SP53	Control	21(14/5/2)
	SDF-1 only	54 (14/19/21)
	AMD3100 and SDF-1	45 (9/15/21)
Z138	Control	105 (34/48/23)
	SDF-1 only	148 (54/63/31)
	AMD3100 and SDF-1	109 (47/29/33)

Table S2.

Cell type	Cell treatment	# of colony found
Jeko	Control	51 (30/15/6)
	on HS27a cells	400 (171/157/72)
	Cultured with HS27a prior to PHA-LCM	200 (61/87/52)
	SDF-1 neutralizing antibodies	81 (36/16/29)
SP53	Control	21(14/5/2)
	on HS27a cells	412 (91/175/146)
	Cultured with HS27a prior to PHA-LCM	529 (141/181/207)
	SDF-1 neutralizing antibodies	67 (26/13/28)
Z138	Control	105 (34/48/23)
	on HS27a cells	242 (101/77/64)
	Cultured with HS27a prior to PHA-LCM	188 (51/69/68)
	SDF-1 neutralizing antibodies	85 (18/31/36)

Table S3.**Jeko CXCR4 KD**

Source of PKH26+ Cells	# of mouse	Tissue Examined	% PKH26+ Cells Recovered
PKH+ injected into mouse and sacrificed after 48 hr.	1	OS/VS/SP	2.56/2.80/11.6
	1		2.00/3.17/10.9
	1		1.53/3.25/16.4
	1		1.71/3.06/14.4
	1		3.90/3.61/7.58
	1		3.67/2.81/13.5
	1		4.10/3.95/12.4
	1		3.17/1.78/10.1
8 total			2.83/3.05/12.1

Jeko Control

Source of PKH26+ Cells	# of mouse	Tissue Examined	% PKH26+ Cells Recovered
PKH+ injected into mouse and sacrificed after 48 hr.	1	OS/VS/SP	5.10/6.02/16.2
	1		6.00/5.95/21.6
	1		6.31/4.66/21.9
	1		5.47/5.64/17.1
	1		4.96/4.68/12.0
	1		5.62/6.05/11.8
	1		9.92/11.8/15.0
	1		6.40/8.06/16.7
	1		6.85/9.82/16.0
9 total			6.29/6.96/16.5

PKH+ cell engraftment reduction %: 55%/56%/26%

Table S4.**Jeko Control**

Source of PKH26+ Cells	# of mouse	Tissue Examined	% PKH26+ Cells Recovered
PKH+ injected into mouse and sacrificed after 48 hr.	1	OS/VS/SP	5.10/6.02/16.2
	1		6.00/5.95/21.6
	1		6.31/4.66/21.9
	1		5.47/5.64/17.1
	1		4.96/4.68/12.0
	1		5.62/6.05/11.8
	1		9.92/11.8/15.0
	1		6.40/8.06/16.7
	1		6.85/9.82/16.0
	Ave.		6.29/6.96/16.5

Jeko Beclin1 KD

PKH+ injected into mouse and sacrificed after 48 hr.	1	OS/VS/SP	2.62/3.48/8.24
	1		2.85/3.13/14.0
	1		3.36/3.31/7.04
	Ave.		2.94/3.31/9.76

SP53 Control

PKH+ injected into mouse and sacrificed after 48 hr.	1	OS/VS/SP	5.41/5.76/12.3
	1		5.01/4.86/11.8
	1		6.09/5.21/12.1
	Ave.		5.50/5.28/12.1

SP53 Beclin1 KD

PKH+ injected into mouse and sacrificed after 48 hr.	1	OS/VS/SP	2.30/2.00/5.53
	1		1.67/1.90/5.09
	1		1.91/1.74/6.54
	Ave.		1.96/1.88/5.72