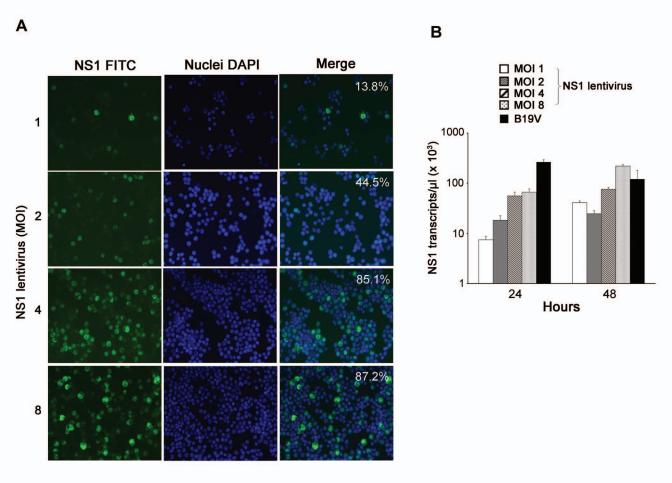
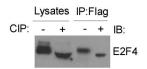
#### Wan, et al., Supplemental Figure 1



## **Supplemental Figure 1**

Titration of NS1 lentivirus. (A) To optimize our experimental conditions for NS1 expression, CD36<sup>+</sup> EPCs were transduced with NS1 lentivirus at an MOI of 1, 2, 4, or 8, followed by IF analysis using anti-Flag (NS1) antibody. (B) NS1 expression levels in NS1-transduced or B19V-infected CD36<sup>+</sup> EPCs were evaluated using a real-time RT-PCR. The cells were transduced with NS1 lentivirus at an MOI of 1, 2, 4, or 8, or infected with ~ 5 × 10<sup>-1</sup> infectious units/cell of B19V. Original magnification, × 200.

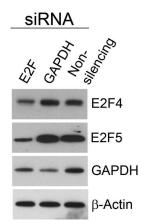
# Wan, et al., Supplemental Figure 2



## **Supplemental Figure 2**

Calf intestine alkaline phosphatase (CIAP) treatment of E2F4. From CD36<sup>+</sup> EPCs transduced with NS1-lentivirus at an MOI of 4, whole cell lysates were prepared at 24 hpt, and subjected to immunoprecipitation with anti-Flag (NS1) antibody. A bound fraction, as well as whole cell lysates was treated with 10 units of CIAP at 37°C for 60 minutes, followed by 4-12% SDS-PAGE and immunoblot analysis with anti-E2F4 antibody. Bands were visualized by incubating a membrane with SuperSignal Chemiluminescent Reagent and then exposing to an X-ray film. IP, immunoprecipitation; IB, immunoblotting.

## Wan, et al., Supplemental Figure 3



## **Supplemental Figure 3**

siRNA-mediated knockdown of E2F4 and E4F5. (A) CD36 $^+$  EPCs were transduced with each lentivirus carrying siRNA against E2F4, E2F5, GAPDH, or non-silencing control. After 24 hours, cells were transduced with NS1 or control lentivirus and collected at 24 hpt for immunoblot analysis with antibodies specific for E2F4, E2F5, GAPDH, or  $\beta$ -Actin (an internal control)

**Supplemental Table 1**Total, live, and dead cell numbers of CD36<sup>+</sup> EPCs after B19V infection or NS1 transduction

		0 h	24 h	48 h	72 h	96 h
Mock	Total	103 ± 10 (100)	226 ± 18 (100)	750 ± 35 (100)	930 ± 54 (100)	1820 ± 96 (100)
	Live	100 ± 9 (97)	220 ± 20 (97)	720 ± 43 (96)	880 ± 49 (95)	1730 ± 8 (95)
	Dead	$3 \pm 2 (3)$	6 ± 2 (3)	$30 \pm 5 (4)$	50 ± 4 (100)	$90 \pm 9 (5)$
	Total	113 ± 18 (100)	63 ± 20 (100)	500 ± 23 (100)	360 ± 18 (5)	530 ± 45 (100)
B19	Live	110 ± 20 (97)	150 ± 25 (92)	430 ± 25 (86)	290 ± 28 (81)	410 ± 51 (77)
	Dead	$3 \pm 2 (3)$	13 ± 2 (8)	70 ± 6 (14)	70 ± 9 (19)	120 ± 10 (23)
	Total	102 ± 10 (100)	240 ± 28 (100)	520 ± 42 (100)	810 ± 84 (100)	1530 ± 121 (100)
Control	Live	100 ± 9 (98)	$230 \pm 20 \ (96)$	480 ± 35 (92)	720 ± 90 (89)	1330 ± 100 (87)
	Dead	2 ± 1 (2)	10 ± 3 (4)	$40 \pm 5 (8)$	90 ± 7 (11)	200 ± 15 (13)
NS1	Total	107 ± 11 (100)	188 ± 14 (100)	330 ± 34 (100)	290 ± 48 (100)	270 ± 61 (100)
	Live	105 ± 7 (98)	170 ± 17 (90)	270 ± 30 (82)	220 ± 53 (76)	175 ± 50 (65)
	Dead	2 ± 1 (2)	18 ± 3 (10)	40 ± 3 (18)	70 ± 5 (24)	95 ± 9 (35)

Cell numbers are shown as mean ± SD (×10<sup>3</sup>). Numbers in ( ) represent mean percentages (%).

Supplemental Table 2

BrdU incorporation (%) in the B19V-infected or NS1-transduced cells

	24 h	48 h	72 h
Mock	58.4	41.0	47.8
B19V	42.2	25.6	14.5
Control	47.7	54.3	52.1
NS1	33.6	31.2	35.3

CD36<sup>+</sup> EPCs were B19V- or mock-infected, or NS1- or control-lentivirus transduced, followed by harvest at 24, 48, and 72 hour time points.

Supplemental Table 3
Cell populations (%) in different cell-cycle phases after B19V infection or NS1 transduction

	Cell cycle	12 h	24 h	48 h
	G1	27.4	27.7	31.7
Mock	S	67.9	71.5	63.7
	G2	4.7	0.8	4.6
B19V	G1	14.2	19.9	26.0
	S	61.3	48.5	32.3
	G2	24.5	31.6	41.7
Control	G1	37.2	41.8	48.5
	S	52.8	46.3	42.9
	G2	10.0	11.9	8.6
NS1	G1	31.0	30.0	37.5
	S	54.7	27.9	15.2
	G2	14.3	42.1	47.3

CD36<sup>+</sup> EPCs were B19V- or mock-infected, or NS1- or control-lentivirus transduced, followed by harvests at 12, 24, and 48 hour time points.

**Supplemental Table 4**Total, live, and dead cell numbers of CD36<sup>+</sup> EPCs after NS1 or NS1mt transduction

		0 h	12 h	24 h	48 h
	Total	448 ± 51 (100)	545 ± 50 (100)	674 ± 75 (100)	518 ± 49 (100)
NS1	Live	430 ± 49 (96)	480 ± 50 (88)	560 ± 80 (83)	389 ± 36 (75)
	Dead	18 ± 2 (4)	65 ± 5 (12)	114 ± 5 (17)	129 ± 12 (25)
	Total	487 ± 36 (100)	808 ± 65 (100)	975 ± 75 (100)	510 ± 100 (100)
NS1mt	Live	468 ± 29 (96)	727 ± 42 (90)	$839 \pm 30 (86)$	1193 ± 125 (79)
	Dead	19 ± 3 (4)	81 ± 7 (10)	136 ± 10 (14)	317 ± 15 (21)
	Total	478 ± 49 (100)	796 ± 74 (100)	1172 ± 84 (100)	2300 ± 108 (100)
Control	Live	$459 \pm 40 (96)$	748 ± 85 (94)	1090 ± 85 (93)	2116 ±125 (92)
	Dead	19 ± 2 (4)	48 ± 3 (6)	82 ± 6 (7)	184 ± 13 (8)

Cell numbers are expressed as mean  $\pm$  SD ( $\times 10^3$ ). Numbers in ( ) represent mean percentages (%).

Supplemental Table 5
Cell populations (%) in different cell-cycle phases after NS1 or NS1mt transduction

	Cell cycle	12 h	24 h	48 h
	G1	31.1	30.1	37.5
NS1	S	54.6	27.8	15.2
	G2	14.3	42.1	47.3
	G1	37.2	38.2	48.4
NS1mt	S	53.6	42.4	36.8
	G2	9.2	19.4	14.8
NS1mt	S	53.6	42.4	36.8

CD36<sup>+</sup> EPCs were transduced with NS1 or NS1mt (NLS mutant) lentivirus.

Supplemental Table 6
Effects of siRNA treatment on cell populations (%) in different cell cycle phases

siRNA	Cell cycle	Control		NS1	
	-	24 h	48 h	24 h	48 h
	G1	37.0	30.6	19.9	13.4
Non-silencing	S	52.8	57.6	22.0	0.2
	G2	10.2	11.8	58.1	84.6
	G1	41.8	45.6	24.0	19.2
GAPDH	S	46.3	42.6	22.9	2.0
	G2	11.9	11.8	53.1	78.8
	G1	53.4	52.0	30.7	28.2
E2F4	S	36.2	37.3	38.4	26.2
	G2	10.4	10.7	30.9	45.6
	G1	53.4	53.4	62.3	45.6
E2F5	S	34.5	34.5	23.6	27.0
	G2	8.6	12.1	14.1	27.4

After specific siRNA treatment for 24 hours, CD36<sup>+</sup> EPCs were transduced with NS1 or control lentivirus, and harvested at 24 and 48 hpt.