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Erratum
SPOP targets oncogenic protein ZBTB3 for destruction to suppress endometrial cancer: Am J Cancer Res. 2019; 9(12): 2797-2812

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We recently found several mistakes in the paper, where the transwell images which are misused in the **Figures 5G**, **5H**, **7K**, **7L**, and Supplementary Figures 1H, 2D, as well as the misused "Actin of western blotting" in the **Figure 7B** as well as the Supplementary Figure 1A. Hence, we would like to publish this Erratum to reflect this change. We appologize for the inconvenience caused by this correction, and the authors declare that this correction does not change the results or conclusions of this paper. The corrected **Figures 5**, **7** and Supplementary Figures 1, 2 are as follows.

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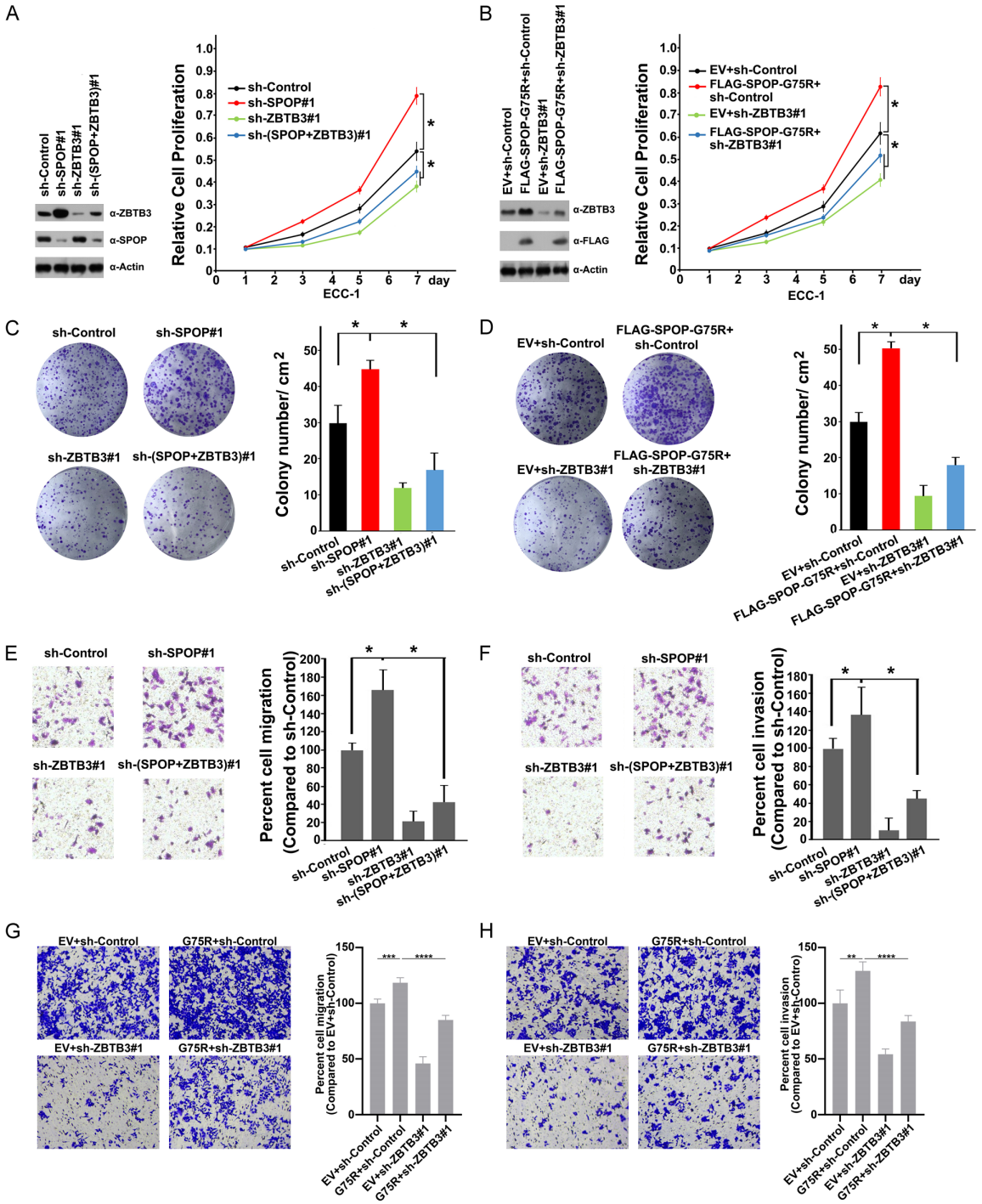


Figure 5. SPOP suppresses cell proliferation, migration and invasion partially dependent on ZBTB3. (A) Western blot (left panel) and cell proliferation assay (right panel) of ECC-1 cells infected with lentivirus expressing the indicated shRNAs. Standard deviation (S.D.) of at least three independent experiments is shown to indicate statistical significance. *P < 0.05. (B) Western blot (left panel) and cell proliferation assay (right panel) of ECC-1 cells infected with empty vector or lentivirus expressing HA-SPOP-G75R in combination with control shRNA or ZBTB3-spefic shRNAs. Data are shown as means ± SD (n=3). *P < 0.05. (C) Cell colony formation assay of ECC-1 cells infected with lentivirus expressing the indicated shRNAs. All data shown are mean values ± SD from three replicates. *P < 0.05. (D) Cell colony formation assay of ECC-1 cells infected with empty vector or lentivirus expressing SPOP-G75R in combination with control shRNA or ZBTB3-spefic shRNAs. Cell migration (E) and invasion (F) assay of ECC-1 cells infected with lentivirus expressing the indicated shRNAs. Data are shown as means ± SD (n=3). *P < 0.05. (G, H) Cell migration (G) and invasion (H) assay of ECC-1 cells with lentivirus expressing FLAG-SPOP-G75R in combination with control shRNA or ZBTB3-spefic shRNAs. Data are shown as means ± SD (n=3). *P < 0.05.

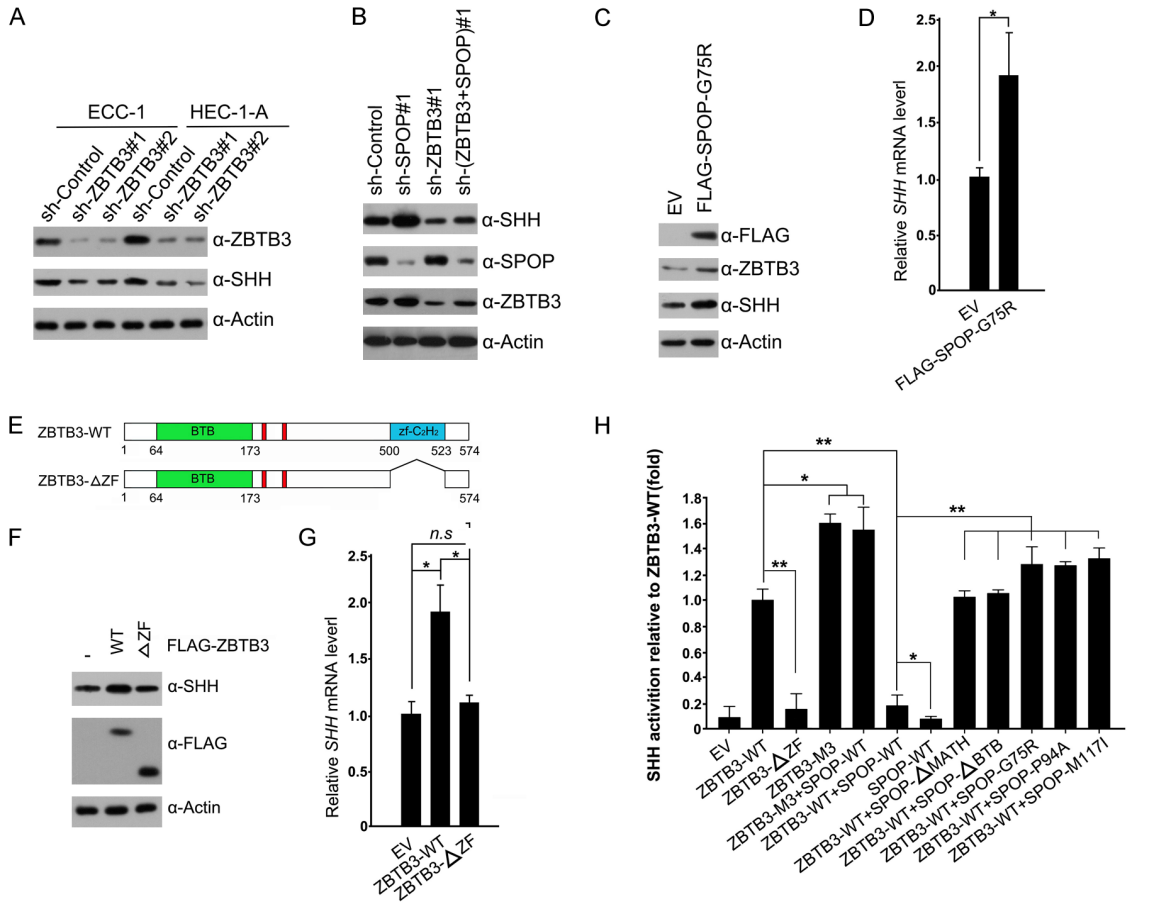
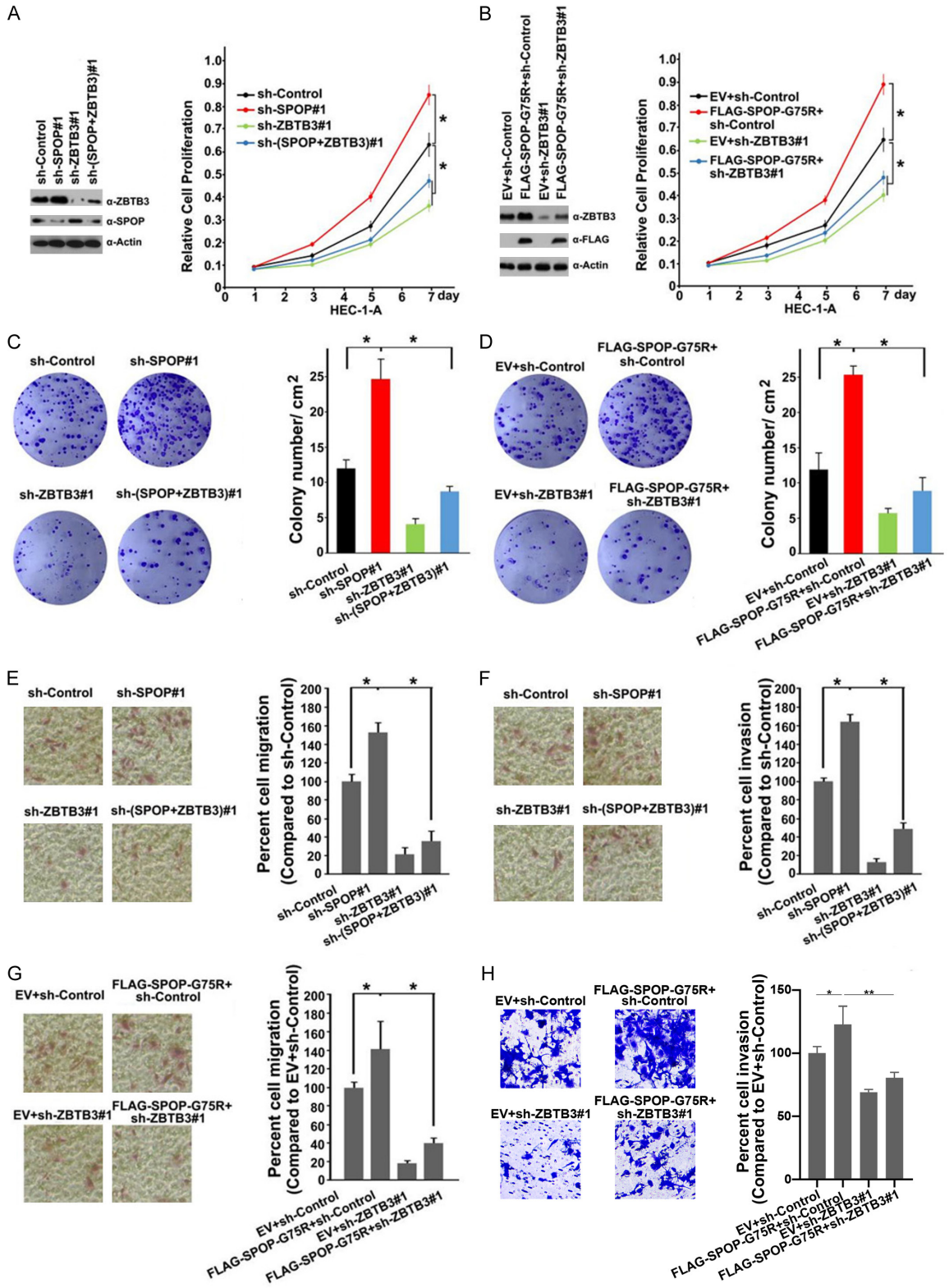
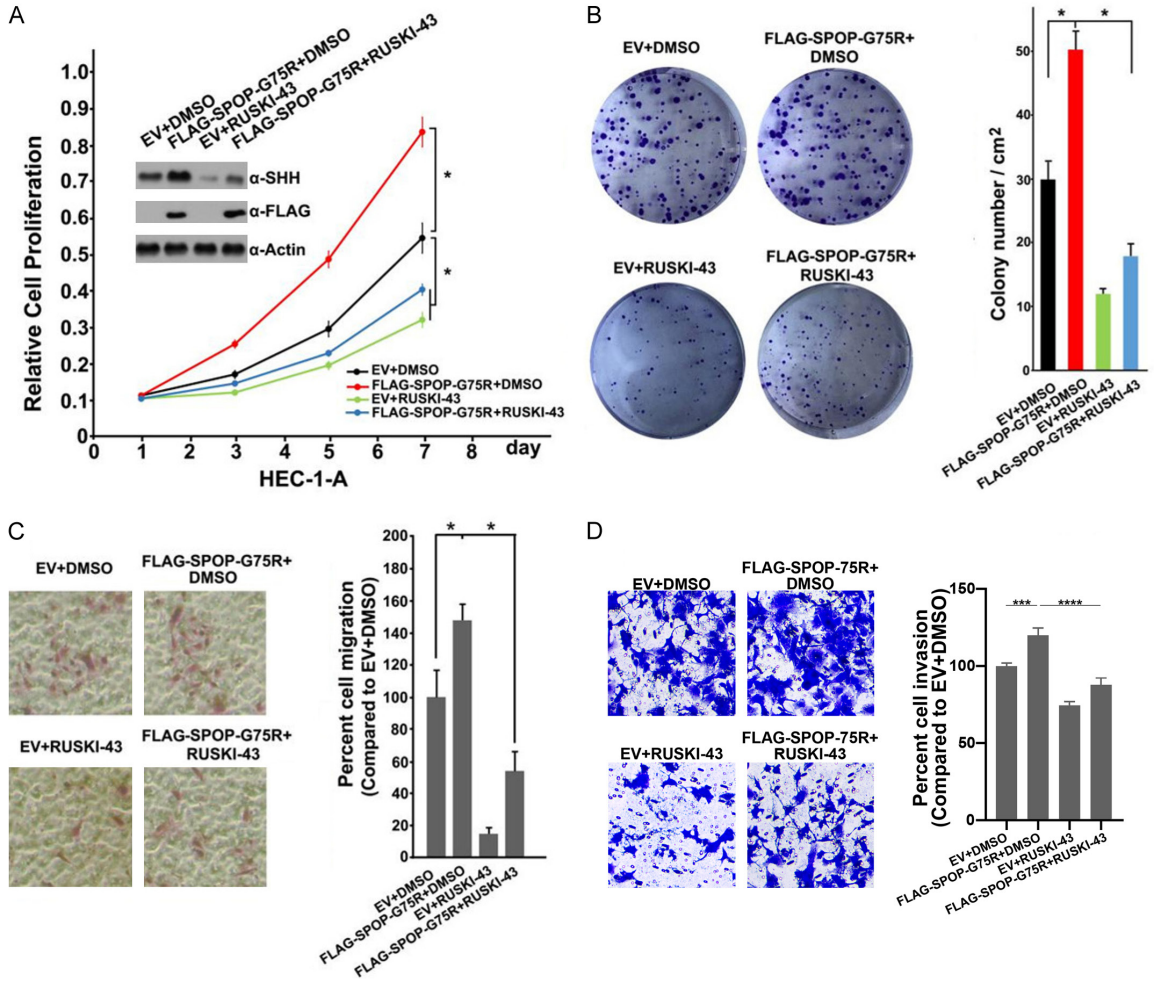

A
ECC-1
HEC-1-A
sh-Control
sh-ZBTB3#1
sh-ZBTB3#2
sh-Control
sh-ZBTB3#1
sh-ZBTB3#2
α-ZBTB3
α-SHH
α-Actin
B
sh-Control
sh-SPOP#1
sh-ZBTB3#1
sh-(ZBTB3+SPOP)#1
α-SHH
α-SPOP
α-ZBTB3
α-Actin
C
EV
FLAG-SPOP-G75R
α-FLAG
α-ZBTB3
α-SHH
α-Actin
D
Relative SHH mRNA level
EV
FLAG-SPOP-G75R
E
ZBTB3-WT
BTB
zf-C2H2
1
64
173
500
523
574
ZBTB3-ΔZF
F
-
WT
ΔZF
FLAG-ZBTB3
α-SHH
α-FLAG
α-Actin
G
n.s
Relative SHH mRNA level
EV
ZBTB3-WT
ZBTB3-ΔZF
H
SHH activition relative to ZBTB3-WT(fold)
EV
ZBTB3-WT
ZBTB3-ΔZF
ZBTB3-M3
ZBTB3-M3+SPOP-WT
ZBTB3-WT+SPOP-WT
SPOP-WT
ZBTB3-WT+SPOP-ΔMATH
ZBTB3-WT+SPOP-ΔBTB
ZBTB3-WT+SPOP-G75R
ZBTB3-WT+SPOP-P94A
ZBTB3-WT+SPOP-M117I
I
Relative Cell Proliferation
EV+DMSO
FLAG-SPOP-G75R+DMSO
EV+RUSKI-43
FLAG-SPOP-G75R+RUSKI-43
α-SHH
α-HA
α-Actin
day
ECC-1
J
EV+DMSO
FLAG-SPOP-G75R+DMSO
EV+RUSKI-43
FLAG-SPOP-G75R+RUSKI-43
Colony number / cm2
K
EV+DMSO
G75R+DMSO
EV+RUSKI-43
G75R+RUSKI-43
Percent cell migration (Compared to EV+DMSO)
L
EV+DMSO
G75R+DMSO
EV+RUSKI-43
G75R+RUSKI-43
Percent cell invasion (Compared to EV+DMSO)

Figure 7. SPOP suppresses ZBTB3-SHH signaling. (A) Western blot of the indicated proteins in WCLs from ECC-1 or HEC-1-A cells infected with indicated shRNAs. (B) Western blot of the indicated proteins in WCLs from ECC-1 infected with the indicated shRNAs. (C) Western Blot of the indicated proteins in WCLs from of EV and FLAG-SPOP-G75R-overexpressing ECC-1 cells. (D) Quantitative RT-qPCR measurement of mRNA expression of *SHH* from of EV and FLAG-SPOP-G75R-overexpressing ECC-1 cells. Data are shown as means ± SD (n=3). *P < 0.05. (E) Schematic representation of ZBTB3 deletion mutants. (F) Western blot of the indicated proteins in WCLs obtained from ECC-1 cells transfected with indicated plasmids. (G) Quantitative RT-qPCR measurement of mRNA expression of *SHH* in ECC-1 cells infected with the indicated plasmids. Data are shown as means ± SD (n=3). *P < 0.05. (H) 293T cells were transfected with the SHH-luc reporter, pTKgalactosidase (internal control), and indicated plasmids. After 24 hr, the luciferase activities were measured by luminometer. Data are shown as means ± SD (n=3). *P < 0.05; **P < 0.01. (I) Western blot and cell proliferation assay of ECC-1 cells infected with lentivirus expressing EV or FLAG-SPOP-G75R, and treated with DMSO or RUSKI-43 (10 μM). Data are shown as means ± SD (n=3). *P < 0.05; **P < 0.01. (J) Cell colony formation assay of ECC-1 cells infected with lentivirus expressing EV or FLAG-SPOP-G75R, and treated with DMSO or RUSKI-43 (10 μM). Data are shown as means ± SD (n=3). *P < 0.05. Cell migration (K) and invasion (L) assay of ECC-1 cells infected with lentivirus expressing EV or FLAG-SPOP-G75R, and treated with DMSO or RUSKI-43 (10 μM). Data are shown as means ± SD (n=3). *P < 0.05.



Supplementary Figure 1. SPOP suppresses HEC-1-A cell proliferation, migration and invasion partially dependent on ZBTB3 (related to **Figure 5**). (A) Western blot (left panel) and Cell proliferation assay (right panel) of HEC-1-A cells infected with lentivirus expressing the indicated shRNAs. Standard deviation (S.D.) of at least three independent experiments is shown to indicate statistical significance. *P < 0.05. (B) Western blot (left panel) and Cell proliferation assay (right panel) of HEC-1-A cells infected with empty vector or lentivirus expressing FLAG-SPOP-G75R in combina-

tion with control shRNA or ZBTB3-spefic shRNAs. Data are shown as means ± SD (n=3). *P < 0.05. (C) Cell colony formation assay of HEC-1-A cells infected with lentivirus expressing the indicated shRNAs. All data shown are mean values ± SD from three replicates. *P < 0.05. (D) Cell colony formation assay of HEC-1-A cells infected with empty vector or lentivirus expressing FLAG-SPOP-G75R in combination with control shRNA or ZBTB3-spefic shRNAs. (E, F) Cell migration (E) and invasion (F) assay of HEC-1-A cells infected with lentivirus expressing the indicated shRNAs. Data are shown as means ± SD (n=3). *P < 0.05. (G, H) Cell migration (G) and invasion (H) assay of HEC-1-A cells with lentivirus expressing FLAG-SPOP-G75R in combination with control shRNA or ZBTB3-spefic shRNAs. Data are shown as means ± SD (n=3). *P < 0.05.



Supplementary Figure 2. SPOP suppresses ZBTB3-SHH signaling (related to **Figure 7**). (A) Western blot and Cell proliferation assay of HEC-1-A cells infected with lentivirus expressing EV or FLAG-SPOP-G75R, and treated with DMSO or RUSKI-43 (10 μM). Data are shown as means ± SD (n=3). *P < 0.05. (B) Cell colony formation assay of ECC-1 cells infected with lentivirus expressing EV or FLAG-SPOP-G75R, and treated with DMSO or RUSKI-43 (10 μM). Data are shown as means ± SD (n=3). *P < 0.05. (C, D) Cell migration (C) and invasion (D) assay of ECC-1 cells infected with lentivirus expressing EV or FLAG-SPOP-G75R, and treated with DMSO or RUSKI-43 (10 μM). Data are shown as means ± SD (n=3). *P < 0.05.