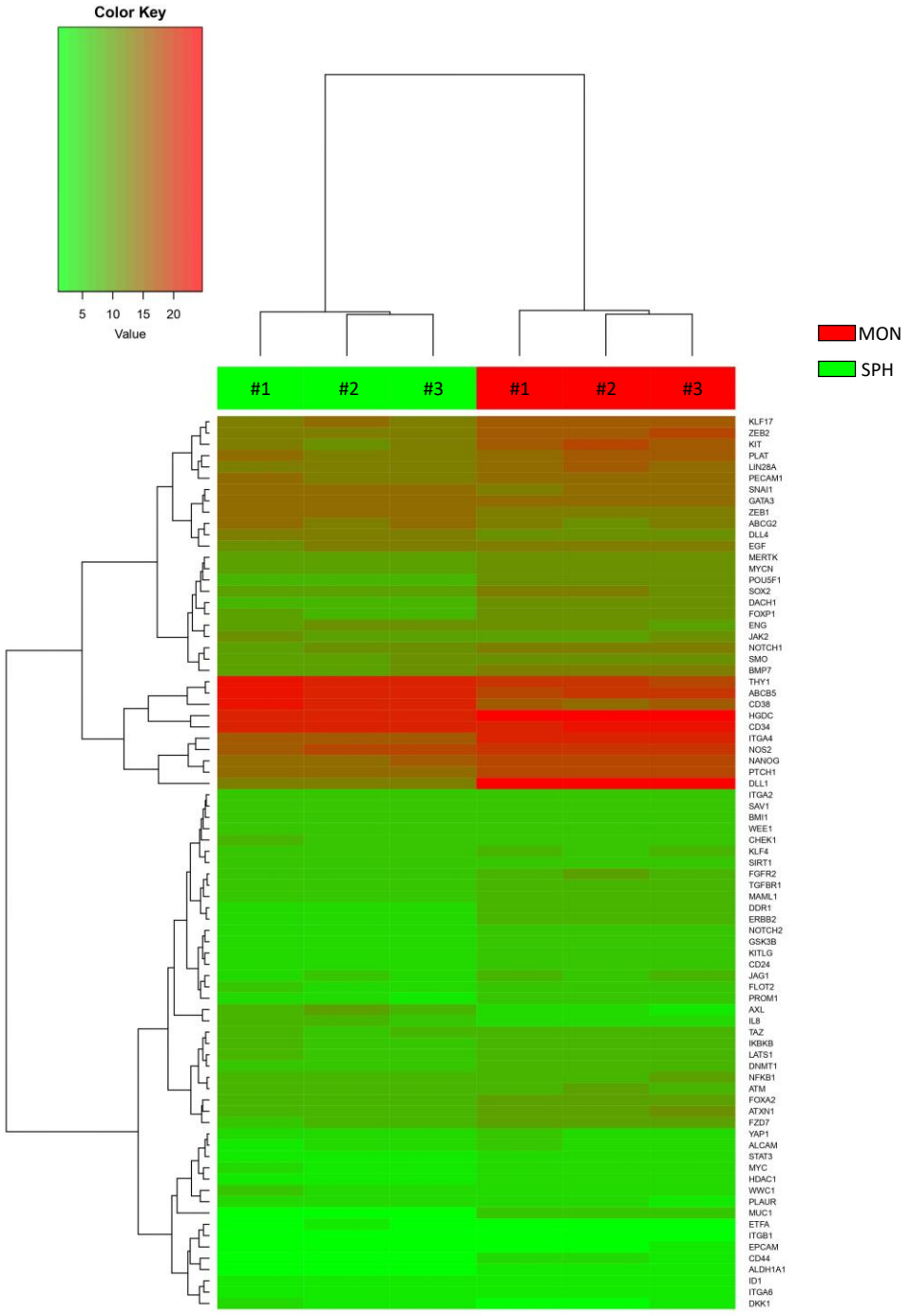
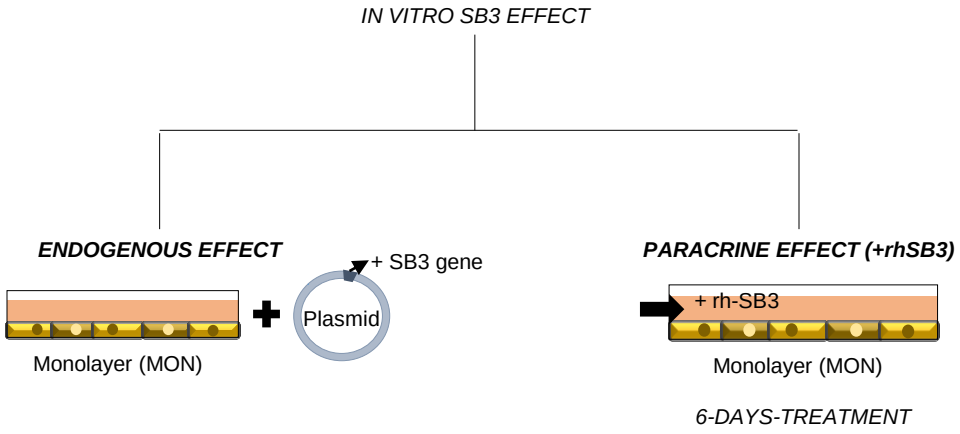
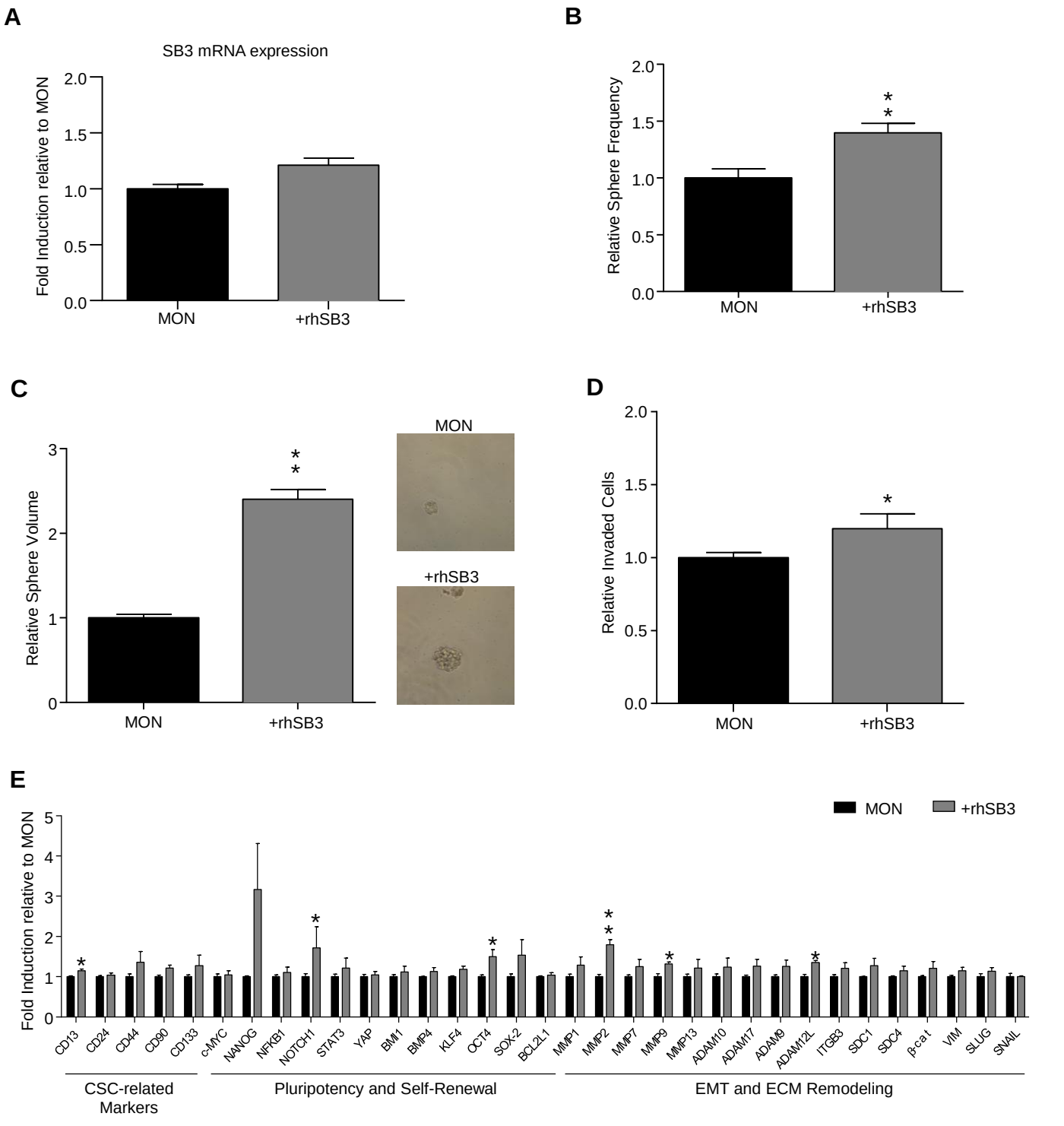
Suppl. Fig.1


Color Key
5
10
15
20
Value
#1
#2
#3
#1
#2
#3
MON
SPH
KLF17
ZEB2
KIT
PLAT
LIN28A
PECAM1
SNAI1
GATA3
ZEB1
ABCG2
DLL4
EGF
MERTK
MYCN
POU5F1
SOX2
DACH1
FOXP1
ENG
JAK2
NOTCH1
SMO
BMP7
THY1
ABCB5
CD38
HGDC
CD34
ITGA4
NOS2
NANOG
PTCH1
DLL1
ITGA2
SAV1
BMI1
WEE1
CHEK1
KLF4
SIRT1
FGFR2
TGFBR1
MAML1
DDR1
ERBB2
NOTCH2
GSK3B
KITLG
CD24
JAG1
FLOT2
PROM1
AXL
IL8
TAZ
IKBKB
LATS1
DNMT1
NFKB1
ATM
FOXA2
ATXN1
FZD7
YAP1
ALCAM
STAT3
MYC
HDAC1
WWC1
PLAUR
MUC1
ETFA
ITGB1
EPCAM
CD44
ALDH1A1
ID1
ITGA6
DKK1

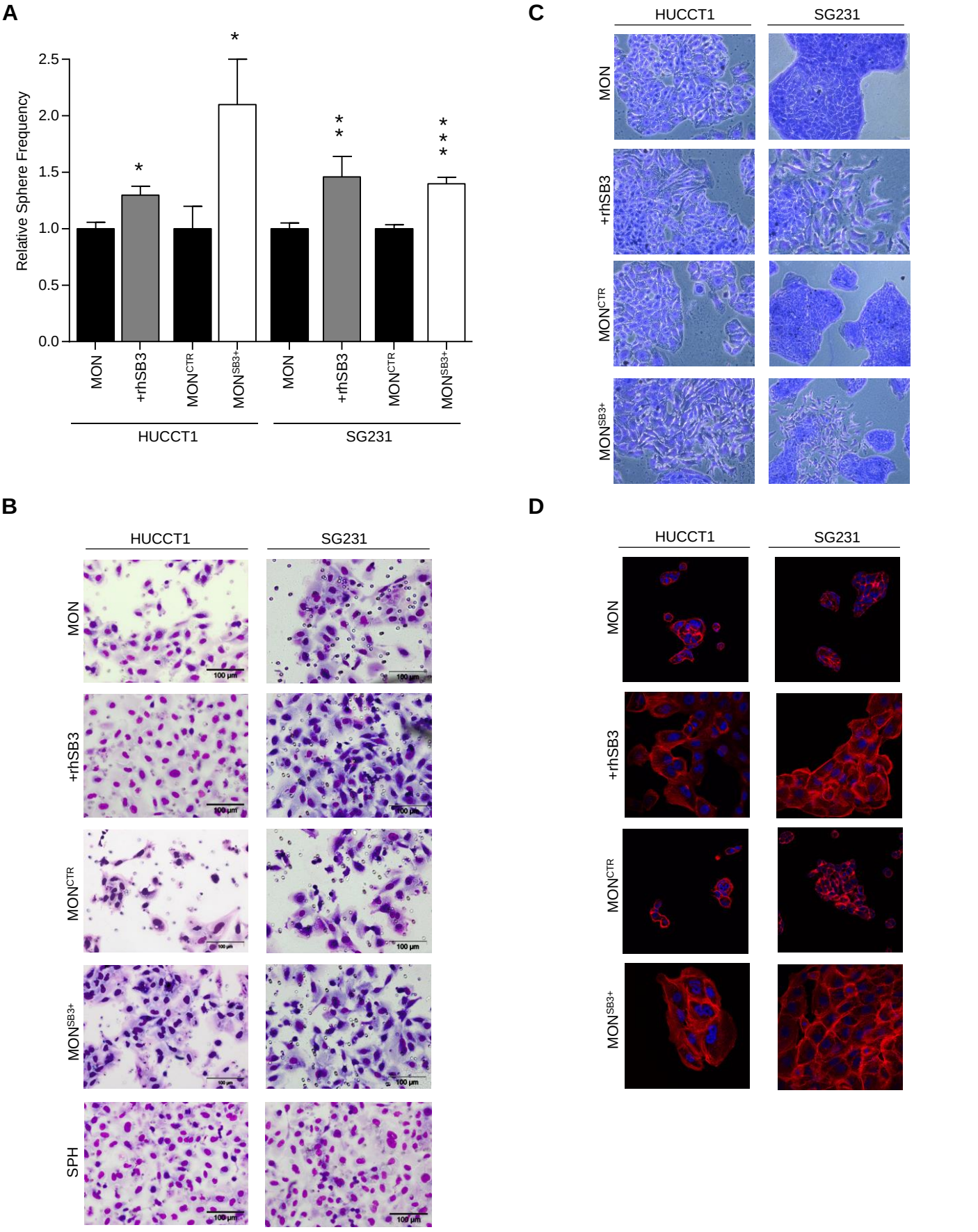
Suppl. Fig.2


IN VITRO SB3 EFFECT
ENDOGENOUS EFFECT
+ SB3 gene
Plasmid
Monolayer (MON)
PARACRINE EFFECT (+rhSB3)
+ rh-SB3
Monolayer (MON)
6-DAYS-TREATMENT

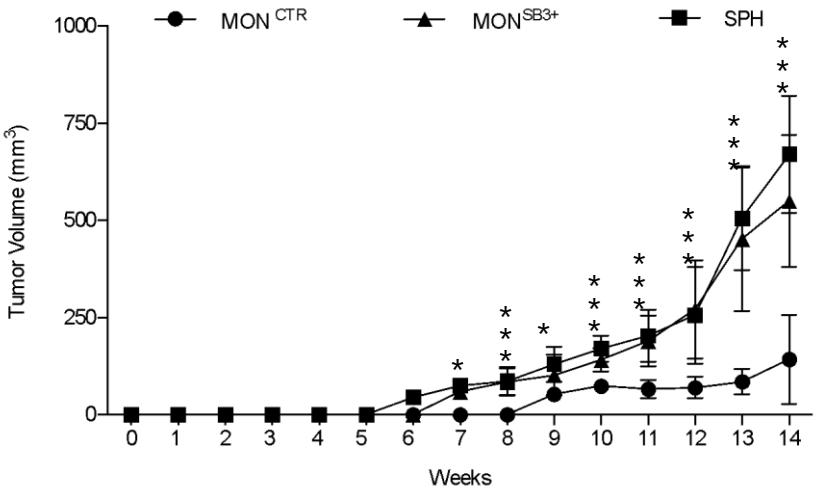
Suppl. Fig.3


A
SB3 mRNA expression
Fold Induction relative to MON
2.0
1.5
1.0
0.5
0.0
MON
+rhSB3
B
Relative Sphere Frequency
2.0
1.5
1.0
0.5
0.0
**
MON
+rhSB3
C
Relative Sphere Volume
3
2
1
0
**
MON
+rhSB3
MON
+rhSB3
D
Relative Invaded Cells
2.0
1.5
1.0
0.5
0.0
*
MON
+rhSB3
E
MON
+rhSB3
Fold Induction relative to MON
5
4
3
2
1
0
CD13
CD24
CD44
CD90
CD133
c-MYC
NANOG
NFKBI
NOTCH1
STAT3
YAP
BMI1
BMP4
KLF4
OCT4
SOX-2
BCL2L1
MMP1
MMP2
MMP7
MMP9
MMP13
ADAM10
ADAM17
ADAM9
ADAM12L
ITGB3
SDC1
SDC4
β-cat
VIM
SLUG
SNAIL
CSC-related Markers
Pluripotency and Self-Renewal
EMT and ECM Remodeling
F
Crystal Violet
MON
+rhSB3
Phalloidin
MON
+rhSB3

Suppl. Fig.4

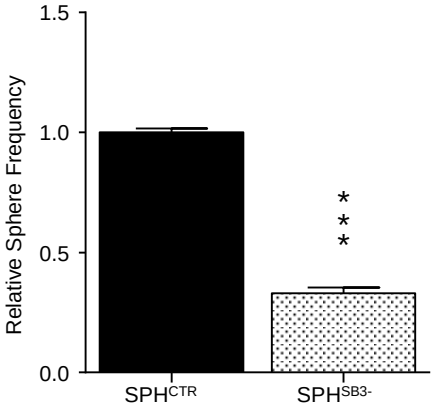

A
Relative Sphere Frequency
2.5
2.0
1.5
1.0
0.5
0.0
MON
+rhSB3
MONCTR
MONSB3+
HUCCT1
SG231
C
HUCCT1
SG231
MON
+rhSB3
MONCTR
MONSB3+
B
HUCCT1
SG231
MON
+rhSB3
MONCTR
MONSB3+
SPH
100 µm
D
HUCCT1
SG231
MON
+rhSB3
MONCTR
MONSB3+

Suppl. Fig.5

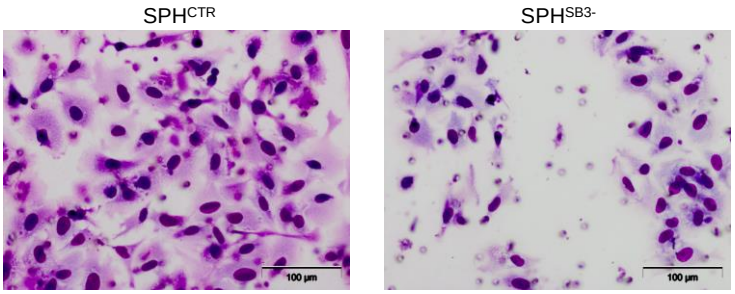

MON CTR
MONSB3+
SPH
Tumor Volume (mm3)
1000
750
500
250
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
Weeks

Suppl. Fig.6

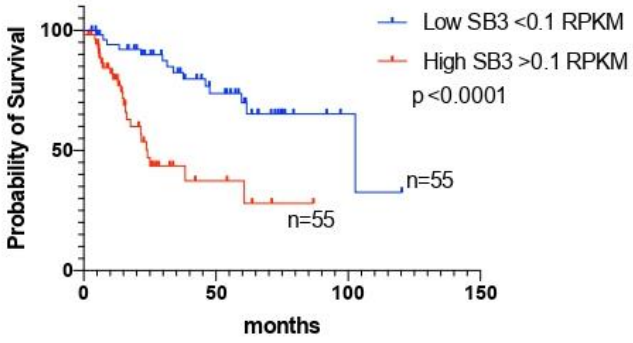
A



B



Suppl. Fig.7


Low SB3 <0.1 RPKM
High SB3 >0.1 RPKM
p <0.0001
n=55
n=55
Probability of Survival
100
50
0
0
50
100
150
months