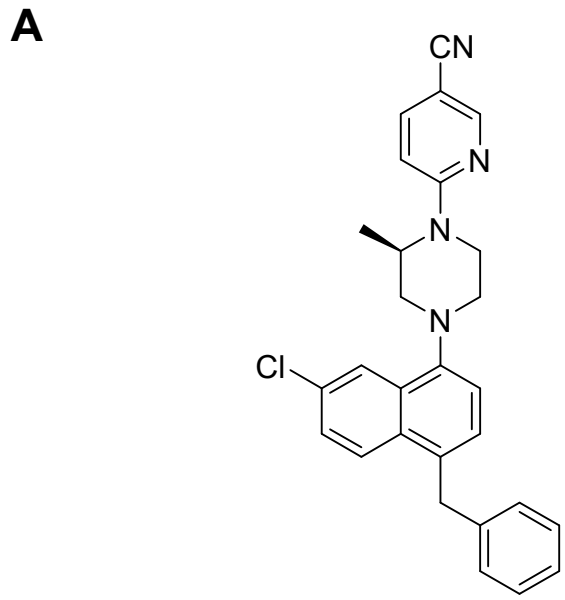
Supplemental Table S1

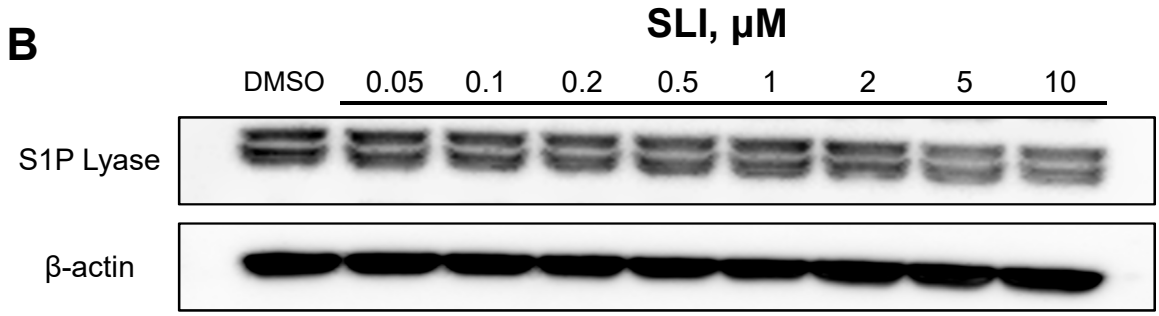
Target Gene	Direction	Sequence (5′ - 3′)
β-actin	F	AGA GCT ACG AGC TGC CTG AC
	R	AGC ACT GTG TTG GCG TAC AG
SGPL1	F	CAG CTA ATT GCA TGG AGT GTC G
	R	CCT TGA CCA TAA ACT CTC TGG C
Keratin 5	F	CCA AGG TTG ATG CAC TGA TGG
	R	TGT CAG AGA CAT GCG TCT GC
Keratin 14	F	TGG ACG TGA AGA CGC GGC TGG
	R	GAT TTG GCG GCT GGA GGA GGT C
Keratin 16	F	TGC CCA CCT TTC CTC CCA GCA A
	R	CCG GGT CTG ACG GCT CGA AG
PCNA	F	CGA CAC CTA CCG CTG CGA CC
	R	TAG CGC CAA GGT ATC CGC GT
CDKN1A	F	TCA GGG TCG AAA ACG GCG GC
	R	TTT GAG GCC CTC GCG CTT CC
CDKN1B	F	AGC GGA GCA ATG CGC AGG AA
	R	GGC GTC TGC TCC ACA GAA CCG

Supplemental Table S1. Primer sequences used in this study

Supplemental Figure S1

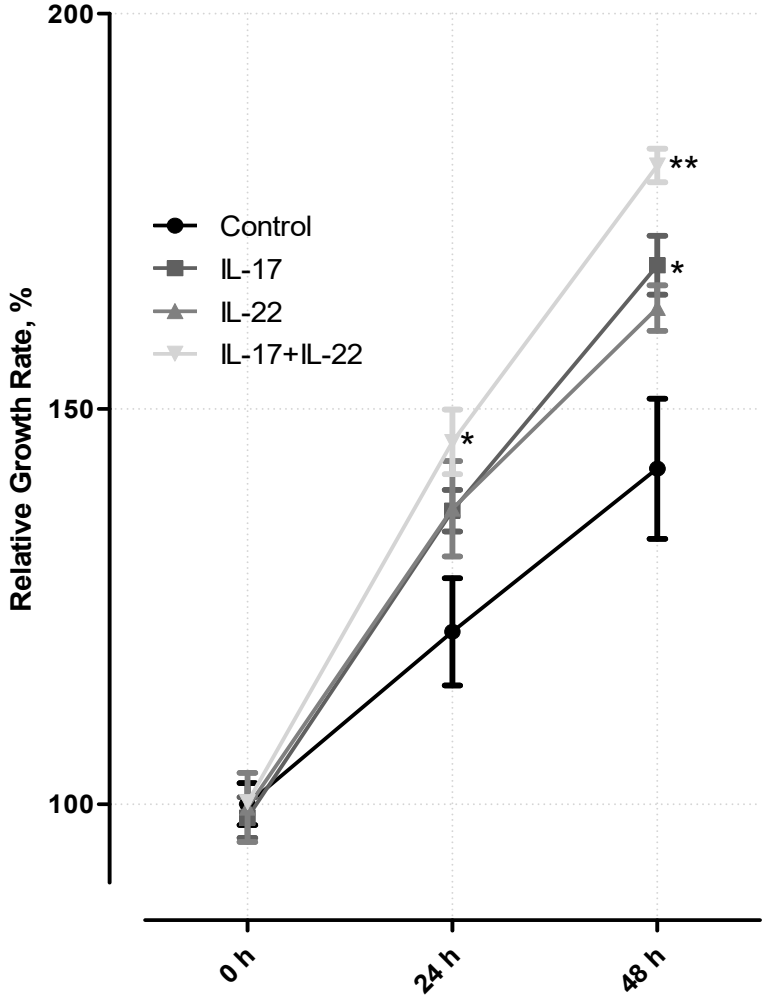


(R)-6-(4-(4-benzyl-7-chloronaphthalen-1-yl)-2-methylpiperazin-1-yl)nicotinonitrile



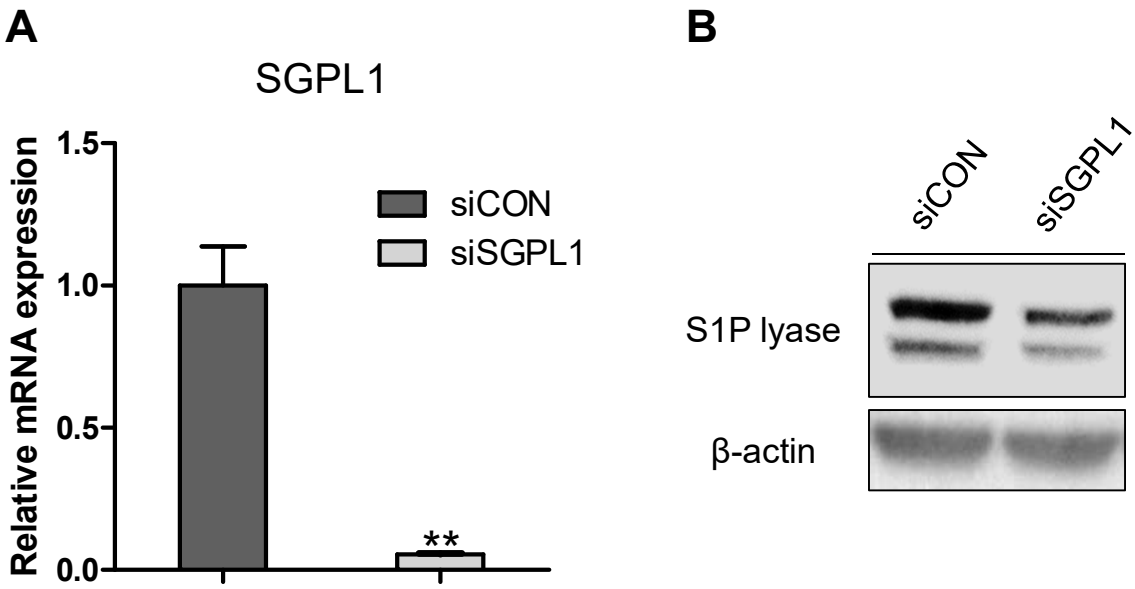
Supplemental Figure S1. SLI induces inhibition of S1P lyase in HEKn cells. (A) Structure of SLI. (B) HEK cell lysates prepared after treatment with SLI at various concentrations for 48 h were subjected to western blot for S1P lyase.

Supplemental Figure S2



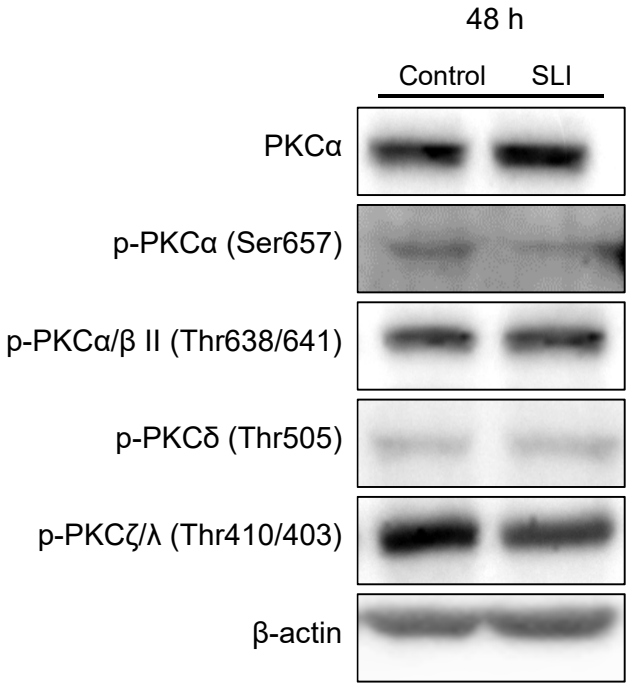
Supplemental Figure S2. Interleukins induces hyperproliferative HEKn cells. HEKn cell treated with IL-17, IL-22 or co-treatment proliferation rates for 24 h and 48 h, as measured by XTT assay. Data are presented as the mean ± SEM, *p < 0.05, **p < 0.01, vs the control, n=3.

Supplemental Figure S3



Supplemental Figure S3. S1P lyase downregulation by siRNA transfection. (A) HEKn grown in growth supplement medium were transfected with siCON or siSGPL1 at 10 nM. 48 h after the siRNA transfection, real-time PCR was analyzed to determine the mRNA level of SGPL1 in HEKn. Amount of mRNA was normalized by β-actin. Data are presented as the mean ± SEM, **$p < 0.01$, vs the control, n=3. (B) Western blotting was performed with cell lysates. Protein expression of S1P lyase. β-actin was used as the control.

Supplemental Figure S4



Supplemental Figure S4. Inhibition of S1P lyase by SLI regulates PKC family activity. HEKn were treated with SLI. Lysates from the cells at 48 h. Phosphorylation of PKC isoforms were analyzed by western blot. β-actin was used as the control.