

Figure S1. MLN4924 inhibits ciliogenesis by inhibiting cilia assembly and promoting cilia disassembly in multiple cell lines without G0/G1 phase change.





Β

DMSO















Figure S2. MLN4924 inhibition of cilia assembly is independent of CP110 and Cep97, but dependent of EGFR.



SS + DMSO 24 h

MINTN

0-

D

MLNON

SS 24 h + MLN 1 h

MLNAN

MLN2h

SS 24 h + MLN 2 h

SS 24 h + MLN 4 h









Si-Cont		Si-RICTOR	
6 h	12 h	6 h	12 h

G



Figure S3. AKT1 involvement in MLN4924-induced cilia disassembly in RPE1 cells.



С



Β



D





Figure S4. Effect of AKT family members and NDE1 on ciliogenesis.



D





p-AKT 308A p-AKT 473A p-AKT myr AKT 1 Vector

Ε

HA-AKT1 308A SS:12 h HA-AKT1 Vector









G



Figure S5. pAKT-Thr³⁰⁸ is responsible for inhibition of cilia growth in RPE1 cells.



Arl13b γ-tubulin DAPI



F





Ε





G



Figure S6. Cross-talk between AKT1 and pVHL in regulation of ciliogensis in RPE1 cells.

Before treatment





After 2 weeks treatment







MLN4924 (0.3 μM)



Vehicle (10% HPBCD) MLN4924 (30mg/kg)

Local application

s.c. Injection

Figure S7. MLN4924 suppresses hair regrowth.