

K63 Ubiquitination of P21 Can Facilitate Pellino-1 in the Context of Chronic Obstructive Pulmonary Disease and Lung Cellular Senescence

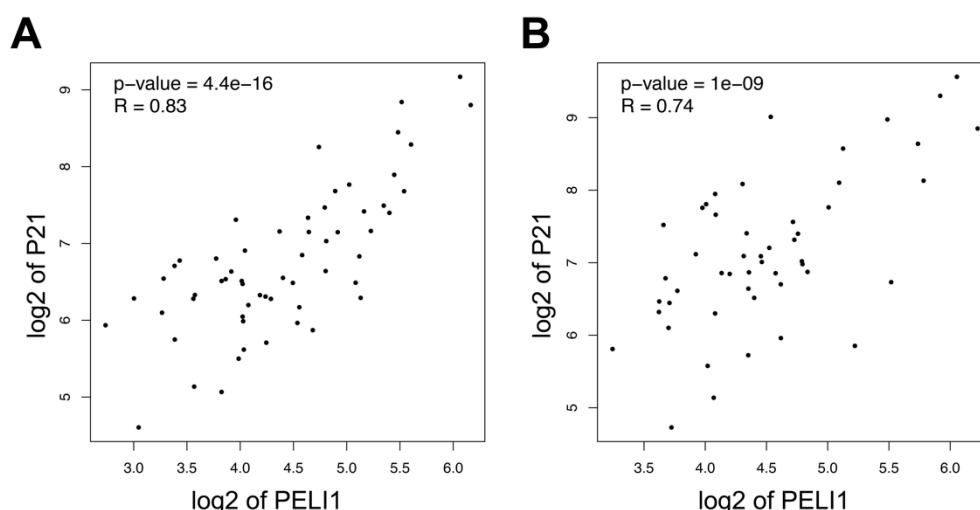


Figure S1. Relationship between PELI1 and p21 in TCGA para-carcinoma lung tissue. Related to Figure 1. (A) The relationship between PELI1 and p21 was significant in para-carcinoma lung tissue of the TCGA Lung adenocarcinoma (LUAD) database. **(B)** Relationship between PELI1 and p21 was significant in para-carcinoma lung tissue of TCGA Lung squamous cell carcinoma (LUSC) database. Data represent R for relative coefficient and P for significance.

Table S1. Primer for RT-qPCR.

Primer Name	Sequence	Length	Tm
GAPDH Forward	CATGTACGTTGCTATCCAGGC	21	60.8
GAPDH Reverse	CTCCTTAATGTCACGCACGAT	21	60.2
Pellino-1 Forward	CAGCACTGTGCATATTGCTTG	21	60.2
Pellino-1 Reverse	CGGCCAATCTGAAACATATCGG	22	61.4
P21 Forward	TGTCCGTCAGAACCCATGC	19	62.0
P21 Reverse	AAAGTCGAAGTTCCATCGCTC	21	60.4
IL-6 Forward	ACTCACCTCTTCAGAACGAATTG	23	60.2
IL-6 Reverse	CCATCTTTGGAAGGTTTCAGGTTG	23	61.3
IL-1 α Forward	TGGTAGTAGCAACCAACGGGA	21	62.9
IL-1 α Reverse	ACTTTGATTGAGGGCGTCATTC	22	60.9
MMP-9 Forward	TGTACCGCTATGGTTACACTCG	22	61.5
MMP-9 Reverse	GGCAGGGACAGTTGCTTCT	19	61.9
MMP-12 Forward	CATGAACCGTGAGGATGTTGA	21	60.0
MMP-12 Reverse	GCATGGGCTAGGATTCCACC	20	62.4
TNF- α Forward	TCCTGTGGAAGATCACCAATGT	22	61.0
TNF- α Reverse	GCAGGCACAACCTTGATGCC	19	61.3
CCL-2 Forward	CAGCCAGATGCAATCAATGCC	21	62.3
CCL-2 Reverse	TGGAATCCTGAACCCACTTCT	21	60.4
Cyclin E Forward	AAGGAGCGGGACACCATGA	19	62.9
Cyclin E Reverse	ACGGTCACGTTTGCTTCC	19	62.8

Table S2. Antibodies and Material Sources.

REAGENT or RESOURCE	SOURCE	IDENTIFIER
Antibodies		
Rabbit anti-P21 (human and mouse)	Cell Signaling Technology (CST)	Cat# 37543; Cat# 2947
Rabbit anti-P16	CST	Cat# 18769
Rabbit anti-Cyclin E1	CST	Cat# 20808
Rabbit anti-Rb	CST	Cat# 9313
Rabbit anti-Phospho-Rb	CST	Cat# 8516
Rabbit anti-P53	CST	Cat# 2527
Rabbit anti-Pellino-1	CST	Cat# 31474
Rabbit anti-SKP2	CST	Cat# 2652
Rabbit anti-GAPDH	CST	Cat# 2118
Rabbit anti-HA	Abcam	Cat# ab236632
Goat anti-Rabbit IgG Secondary Antibody, Western Blot	Invitrogen	Cat# 31466
Goat anti-Rabbit IgG Secondary Antibody, Alexa Fluor 594	Invitrogen	Cat# A-11012
Goat anti-Rabbit IgG Secondary Antibody, Alexa Fluor 488	Invitrogen	Cat# A-11008
Chemicals, peptides, and recombinant proteins		
Budesonide	Med Chem Express	Cat# HY-13580; CAS: 51333-22-3
MG132	Med Chem Express	Cat# HY-13259; CAS: 133407-82-6
D-Galactose	Sigma-Aldrich	Cat# G5388; CAS: 59-23-4
CSE (5%)	This paper	N/A
Critical commercial assays		
Senescence β -Galactosidase Staining Kit	Beyotime, Shanghai, China	Cat# C0602
Cell Cycle Analysis Kit	Beyotime, Shanghai, China	Cat# C1052
IHC ABC stain kit	Zsbio, Beijing, China	Cat# PK-4002
H&E stain kit	Beyotime, Shanghai, China	Cat# S0105
Lipid Peroxidation MDA Assay Kit	Beyotime, Shanghai, China	Cat# S0131
Total Superoxide Dismutase Assay Kit with NBT	Beyotime, Shanghai, China	Cat# S0109
Mouse Tumor Necrosis Factor- α Enzyme-Linked Immuno-Sorbent Assay Kit	Beyotime, Shanghai, China	Cat# PT512
Mouse Interleukin-6 Enzyme-Linked ImmunoSorbent Assay Kit	Beyotime, Shanghai, China	Cat# PI326