Figure legend

Fig. 1. Detection of HPV 16, 18 and 33 DNAs in cervical cancer cell lines and primary cervical cancers by multiplex PCR analysis. Specificity and sensitivity for detection of HPV 16, 18 and 33 DNAs. PCR was performed using DNA from CaSki (~600 copies of HPV 16 integrated), SiHa (1~2 copies of HPV 16 integrated), HeLa (20~50 copies of HPV 18 integrated), and A549 cells with/without HPV33 containing plasmid DNA. Each sample was serially diluted with A549 cell DNA up to the copy number of 0.1~1.0 per cell for HPV DNA. Five micro liters of the amplicons were analyzed by electrophoresis on 3% agarose gels and ethidium bromide staining. 100 bp DNA Ladder (TaKaRa, Shiga, Japan) was used as a size marker.

Supporting Information

Table S1. Prevalence of HPV 16, 18, and 33 in lung adenocarcinomas in East Asia

Table S2. Primer sequences for detection of HPV DNA in cancer cell DNA

Table S3-1. p53 status defined in our studies but not registered in the COSMIC database

Table S3-2. Concordance of p53 status defined in our studies and registered in the COSMIC database

Table S3-3. Discordance of p53 status defined in our studies and registered in the COSMIC database

Table 1. Clinicopathologic characteristics of lung adenocarcinomas

		Primary tumor		Brain metastasis
	PCR	Multiplex (%)	Nested (%)	Both (%)
No. of cases		275	138	22
Gender	Male	161 (59)	81 (59)	15 (68)
	Female	114 (41)	57 (41)	7 (32)
Age (years)	Mean	60.7	62.0	57.3
	Range	30–84	30–84	48–74
Pathological stage	I	201 (73)	124 (90)	
	II	27 (10)	6 (4)	
	III	45 (16)	8 (6)	
	IV	2 (1)	0 (0)	
Smoking history	Smoker	71 (55)	69 (58)	15 (68)
	Nonsmoker	57 (45)	51 (43)	7 (32)
	unknown	147	18	0
p53 mutation	+	34 (32)	34 (33)	16 (73)
	−	72 (68)	70 (67)	6 (27)
	ND†	169	34	0

† not determined.

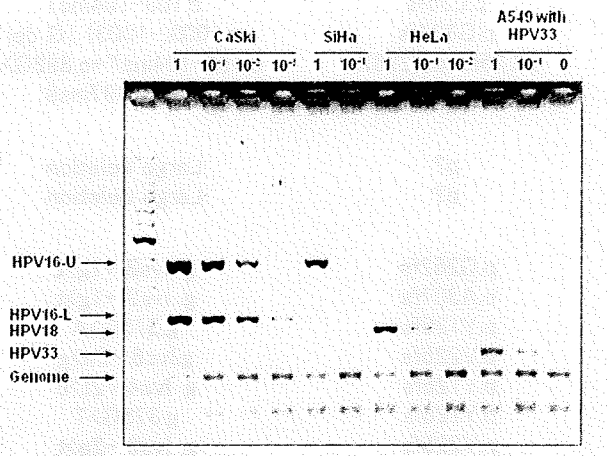
Table 2. Status of the p53 gene in 91 lung cancer cell lines

No	Cell line	Hist.	Amino acid	Nucleotide
Point mutation				
1	ABC1	AdC	p.P278S	c.832C>T
2	CALU-3	AdC	p.M237I	c.711G>T
3	HCC44	AdC	p.S94X+p.R175L	c.281C>G+c.524G>T
4	HCC78	AdC	p.S241F	c.722C>T
5	HCC193	AdC	p.R248Q	c.743G>A
6	HCC515	AdC	p.L194F	c.580C>T
7	Ma10	AdC	p.G245V	c.734G>T
8	Ma17	AdC	p.Y126C	c.377A>G
9	Ma24	AdC	p.R337C	c.1009C>T
10	H23	AdC	p.M246I	c.738G>C
11	H441	AdC	p.R158L	c.473G>T
12	H820	AdC	p.T284P	c.850A>C
13	H1437	AdC	p.R267P	c.800G>C
14	H1975	AdC	p.R273H	c.818G>A
15	H2009	AdC	p.R273L	c.818G>T
16	H2087	AdC	p.V157F	c.469G>T
17	H2122	AdC	p.Q16L+p.C176F	c.527G>T+c.47A>T
18	H2126	AdC	p.E62X	c.184G>T
19	PC3	AdC	p.R282W	c.844C>T
20	PC7	AdC	p.H214R	c.641A>G
21	PC9	AdC	p.R248Q	c.743G>A
22	PC14	AdC	p.R248W	c.742C>T
23	RERF-LCMS	AdC	p.R248L	c.743G>T
24	RERF-LC-OK	AdC	p.F113C	c.338T>G
25	VMRC-LCD	AdC	p.R175H	c.524G>A
26	II-18	AdC	p.K164X	c.490A>T
27	H322	AdC	p.R248L	c.743G>T
28	EBC1	SqC	p.E171X	c.511G>T
29	LC1/Sq	SqC	p.M237I	c.711G>T
30	LK2	SqC	p.V272M	c.814G>A
31	HCC15	SqC	p.D259V	c.776A>T
32	H520	SqC	p.W146X	c.438G>A
33	SK-MES-1	SqC	p.E298X	c.892G>T
34	PC10	SqC	p.G245C	c.733G>T
35	HCC366	ASC	p.Y220C	c.659A>G
36	H596	ASC	p.G245C	c.733G>T
37	Lu65	LCC	p.E11Q	c.31G>C
38	Ma2	LCC	p.R175H	c.524G>A
39	Ma25	LCC	p.M237I	c.711G>T
40	H661	LCC	p.R158L+p.S215I	c.473G>T+c.644G>T
41	H1155	LCC	p.R273H	c.818G>A
42	PC13	LCC	p.G334V	c.1001G>T
43	HCC33	SCLC	p.C242Y	c.725G>A
44	Lu134	SCLC	p.P278L	c.833C>T
45	Lu135	SCLC	p.G244C	c.730G>T
46	Lu139	SCLC	p.V157F	c.469G>T
47	N417	SCLC	p.E298X	c.892G>T
48	H69	SCLC	p.E171X	c.511G>T
49	H128	SCLC	p.E62X	c.184G>T
50	H345	SCLC	p.Y236C	c.707A>G
51	H446	SCLC	p.Q154V	c.461G>T
52	H841	SCLC	p.C242S	c.724A>T
53	H1184	SCLC	p.G334V	c.1001G>T
54	H1450	SCLC	p.L194R	c.581T>G
55	H1607	SCLC	p.P151H	c.452C>A

56	H1963	SCLC	p.V147D+p.H214R	c.440T>A+c.641A>G
57	H2107	SCLC	p.K101X	c.301A>T
58	H2141	SCLC	p.R209X	c.625A>T
59	H2171	SCLC	p.Q144X	c.430C>T
60	H2195	SCLC	p.V157F	c.469G>T
61	H1618	SCLC	p.R248L	c.743G>T
62	H187	SCLC	p.S241C	c.722C>G
63	H510	SCLC	p.R282G	c. 844C>G
64	H1770	Neuroendocrine	p.R248W	c.741-742CC>TT
Small insertion/deletion (≦9 nucleotides)				
1	Ma29	AdC	p.V121fs	c.363delT
2	H522	AdC	p.P191fs	c.572delC
3	H1648	AdC	p.L35fs	c.103-104insT
4	HCC95	SqC	p.G334fs	c.1000(-1003) 1G del
5	H157	SqC	p.L35fs+p.E298X	c.103-104insT+c.892G>T
6	H727	Carcinoid	p.Q165-S166insYKQ	c.496-497ins9
Large deletion				
1	H358	AdC	p?	Large deletion
2	H1299	LCC	p?	Large deletion
Splicing-site mutation				
1	H1703	AdC	p.G262fs	g. Ivs8 +1g>t
2	H1819	AdC	p.A307fs	g. Ivs9 +1g>t
3	H2347	AdC	p.Y126fs	g.375G>A
4	H1650	AdC	p.V225fs	g.Ivs6 -2a>g
5	Sq1	SqC	p.Y126fs	g. Ivs4 +2t>c
6	H82	SCLC	p.Y126fs	g.375G>T
7	H209	SCLC	p.V225fs	g. Ivs6 -2a>t
8	H526	SCLC	p.S33fs	g. Ivs3 -1g>c
9	H1339	SCLC	p.I332fs	g.Ivs9 +1g>t
Wild type				
1	A427	AdC		
2	A549	AdC		
3	Ma12	AdC		
4	Ma26	AdC		
5	H1395	AdC		
6	H226	SqC		
7	Lu99A	LCC		
8	H460	LCC		
9	Lu24	SCLC		
10	Ms18	SCLC		

p, c, and g stand for protein, cDNA and genomic DNA.

Fig. 1.



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