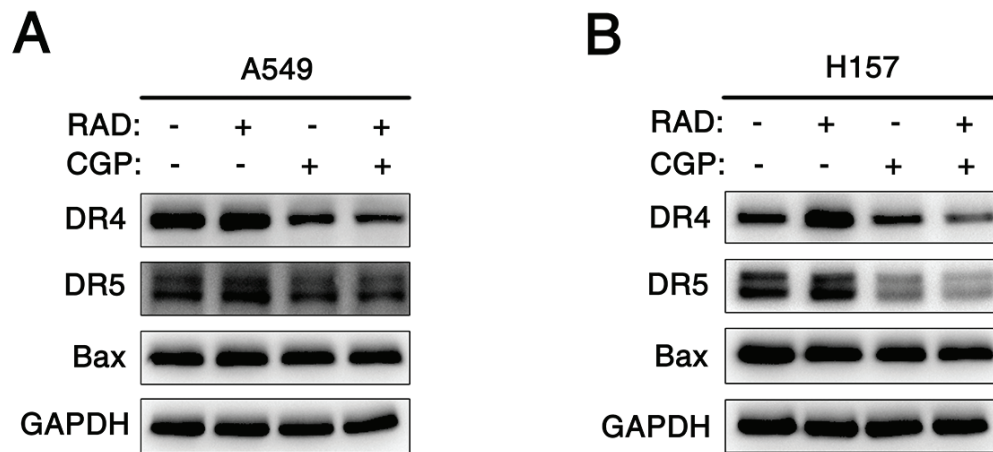
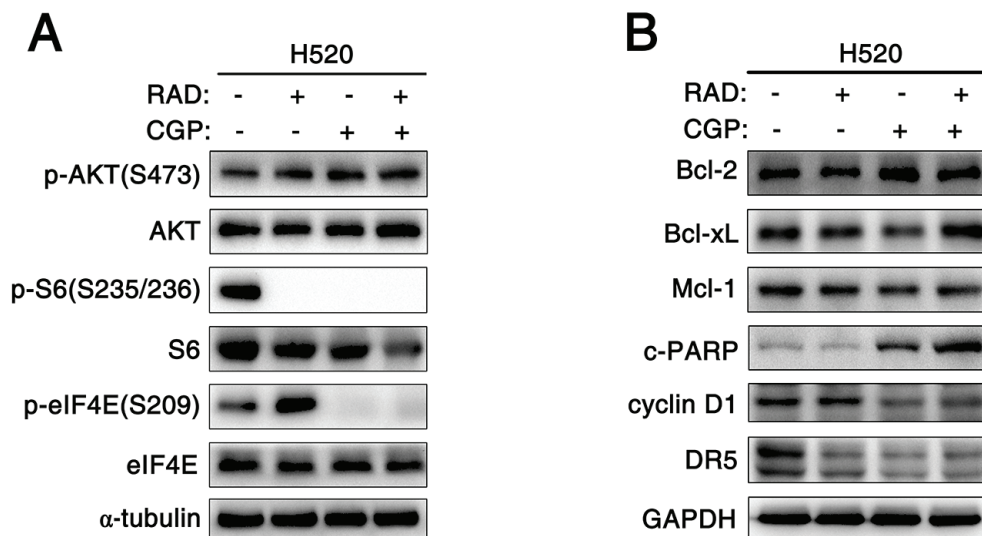


## SUPPLEMENTARY FIGURES AND TABLES



**Supplementary Figure S1: Detection of DR4, DR5 and Bax levels in A549 and H157 cells.** Western blotting analysis of DR4, DR5 and Bax in A549 **A**, and H157 **B**. Cells were treated with 25nM RAD001 (RAD) alone, 25 $\mu$ M CGP57380 (CGP) alone and their combination for 24 h. GAPDH served as a loading control.



**Supplementary Figure S2: Mnk1 inhibitor CGP57380 abrogates the eIF4E phosphorylation induced by mTOR inhibitor RAD001 and the combination of CGP57380 and RAD001 elicits apoptosis in H520 cells.** A-B. H520 cells were treated with 25nM RAD001 (RAD) alone, 25 $\mu$ M CGP57380 (CGP) alone and their combination for 24 h. Then cell lysates were collected and subjected to western blotting for the indicated proteins.  $\alpha$ -tubulin or GAPDH was used as a loading control.

**Supplementary Table S1: Clinicopathological characteristics of studied 353 cases of non-small cell lung cancer (NSCLC) patients**

<b>Patients characteristics</b>	<b>No. of patients (%)</b>
<b>Age(years)</b>	
≤50	98(27.8)
>50	255(72.2)
<b>Gender</b>	
Male	267(75.6)
Female	86(24.4)
<b>Clinical stages</b>	
Stage I	78(22.1)
Stage II	72(20.4)
Stage III	169(47.9)
Stage IV	34(9.6)
<b>Lymph node status</b>	
N0	142(40.2)
N1/N2/N3	211(59.8)
<b>Histological type</b>	
SCC	159(45.0)
ADC	194(55.0)
<b>Pathological grades</b>	
Well	6(1.7)
Moderate	144(40.8)
Poor	203 (57.5)

**Supplementary Table S2: Analysis of the association between expression of p-Mnk1 and p-eIF4E proteins and clinicopathological features of NSCLC (n=353)**

Clinicopathological features (n)	p-Mnk1			p-eIF4E			p-Mnk1 / p-eIF4E <sup>#</sup>		
	P (%)	N (%)	P-value	P (%)	N (%)	P-value	P <sup>+</sup> (%)	N <sup>-</sup> (%)	P-value
<b>Age(years)</b>									
≤50 (n=98)	71(72.4)	27(27.6)		48(49.0)	50(51.0)		46(46.9)	52(53.1)	
>50 (n=255)	161(63.1)	94(36.9)	0.099	138(54.1)	117(45.9)	0.387	114(44.7)	141(55.3)	0.706
<b>Gender</b>									
Male(n=267)	171(64.0)	96(36.0)		138(51.7)	129(48.3)		119(44.6)	148(55.4)	
Female(n=86)	61(70.9)	25(29.1)	0.242	48(55.8)	38(44.2)	0.505	41(47.7)	45(52.3)	0.615
<b>Clinical stages</b>									
Stage <sub>I-II</sub> (n=150)	92(61.3)	58(38.7)		79(52.7)	71(47.3)		63(42.0)	87(58.0)	
Stage <sub>III-IV</sub> (n=203)	140(69.0)	63(31.0)	0.135	107(52.7)	96(47.3)	0.994	97(47.8)	106(52.2)	0.281
<b>LN status</b>									
LNM (n=211)	141(66.8)	70(33.2)		115(54.5)	96(45.5)		102(48.3)	109(51.7)	
No LNM (n=142)	91(64.1)	51(35.9)	0.595	71(50.0)	71(50.0)	0.406	58(40.8)	84(59.2)	0.165
<b>Histological type</b>									
SCC(n=159)	95(59.7)	64(40.3)		67(42.1)	92(57.9)		57(35.8)	102(64.2)	
ADC(n=194)	137(70.6)	57(29.4)	0.032*	119(61.3)	75(38.7)	0.000*	103(53.1)	91(46.9)	0.001*
<b>Pathological grade</b>									
Well (n=6)	6(100.0)	0(0.0)		5(83.3)	1(16.7)		5(83.3)	1(16.7)	
Moderate(n=144)	93(64.6)	51(35.4)		72(50.0)	72(50.0)		63(43.8)	81(56.3)	
Poor (n=203)	133(65.5)	70(34.5)	0.200	109(53.7)	94(46.3)	0.252	92(45.3)	111(54.7)	0.162
<b>Survival status</b>									
Alive(n=186)	107(57.5)	79(42.5)		84(45.2)	102(54.8)		68(36.6)	118(63.4)	
Dead(n=167)	125(74.9)	42(25.1)	0.001*	102(61.1)	65(38.9)	0.003*	92(55.1)	75(44.9)	0.000*

\*Chi-square test, statistically significant difference ( $P < 0.05$ ). Abbreviations: LNM, lymph node metastasis; SCC, squamous cell carcinoma; P, Positive; N, Negative; #P<sup>+</sup>, common positive

**Supplementary Table S3: The pairwise association between expression of p-Mnk1 and p-eIF4E proteins in 353 cases of NSCLC by Spearman's rank correlation test**

	p-Mnk1		<i>P</i> -value
	Positive (%)	Negative (%)	
<b>p-eIF4E</b>			
Positive (%)	160(86.0)	26(14.0)	0.000
Negative (%)	72(43.1)	95(56.9)	( <i>r</i> = 0.451)

\*Spearman's rank correlation test, statistically significant difference ( $P < 0.05$ )