1. SPSS data of cell viability on KKU-M213B, KKU-100, and H69 cell lines.

1.1 KKU-M213B cells

1.1.1 24 h

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11603.526	5	2320.705	65.263	.000
Within Groups	213.354	6	35.559		
Total	11816.880	11			

Duncan[a]

		Subset for alpha = 0.05				
TLPE extract	N	1	2	3	4	5
500	2	8.5725				
250	2		30.8670			
125	2		34.3990			
62.5	2			62.3005		
31.25	2				79.4120	
solvent control	2					100.0000
Sig.		1.000	.575	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.1.2 48 h

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26265.908	7	3752.273	197.363	.000
Within Groups	152.097	8	19.012		
Total	26418.005	15			

Duncan[a]

		Subset for alpha = 0.05			
TLPE extract	N	1	2	3	4
12	2	1.1765			
15	2	1.3965			
30	2	1.4410			
10	2	1.9310			
9	2		55.4655		
7.5	2			67.7045	
3.75	2				90.9185
solvent control	2				100.0000
Sig.		.874	1.000	1.000	.071

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.1.3 72 h

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24950.598	7	3564.371	161.449	.000
Within Groups	176.619	8	22.077		
Total	25127.216	15			

Duncan[a]

		Subset for alpha = 0.05				
TLPE extract	N	1	2	3	4	5
12	2	.8395				
10	2	1.0505				
30	2	1.1230				
15	2	1.3100				
9	2		14.8365			
7.5	2			60.9085		
3.75	2				85.9390	
solvent control	2					100.0000
Sig.		.927	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.2 KKU-100 cells

1.2.1 24 h

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11818.836	5	2363.767	851.584	.000
Within Groups	16.654	6	2.776		
Total	11835.490	11			

Duncan[a]

		Subset for alpha = 0.05				
TLPE extract	N	1	2	3	4	5
500	2	3.7240				
250	2		45.3245			
125	2		48.0310			
62.5	2			59.1465		
31.25	2				88.6560	
solvent control	2					100.0000
Sig.		1.000	.155	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.2.2 48 h

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14701.493	7	2100.213	77.785	.000
Within Groups	216.002	8	27.000		
Total	14917.495	15			

Duncan[a]

		Subset for alpha = 0.05			
TLPE extract	N	1	2	3	4
30	2	10.1025			
15	2		40.3710		
12	2			61.5495	
7.5	2				91.1220
9	2				91.4395
10	2				91.5375
3.75	2				94.4315
solvent control	2				100.0000
Sig.		1.000	1.000	1.000	.150

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.2.3 72 h

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25156.769	7	3593.824	606.081	.000
Within Groups	47.437	8	5.930		
Total	25204.206	15			

Duncan[a]

		Subset for alpha = 0.05				
TLPE extract	N	1	2	3	4	5
30	2	1.6850				
15	2	3.7245				
12	2	5.8330				
10	2		24.3595			
9	2			43.3820		
7.5	2				67.0135	
solvent control	2					100.0000
3.75	2					104.4775
Sig.		.141	1.000	1.000	1.000	.103

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.3 H69 cells

1.3.1 24 h

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11013.466	5	2202.693	224.285	.000
Within Groups	58.926	6	9.821		
Total	11072.391	11			

Duncan[a]

		Subset for alpha = 0.05					
TLPE extract	N	1	2	3	4	5	6
500	2	16.8755					
250	2		30.5060				
125	2			53.2495			
62.5	2				77.7240		
31.25	2					88.7365	
solvent control	2						100.0000
Sig.		1.000	1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.3.2 48 h

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6515.345	7	930.764	86.997	.000
Within Groups	85.590	8	10.699		
Total	6600.936	15			

Duncan[a]

		Subset for alpha = 0.05					
TLPE extract	N	1	2	3	4	5	6
30	2	22.5375					
15	2		48.6780				
12	2		54.9245	54.9245			
10	2		56.0240	56.0240			
9	2			60.2800	60.2800		
7.5	2				63.9675	63.9675	
3.75	2					68.4805	
solvent control	2						100.0000
Sig.		1.000	.063	.155	.292	.205	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

1.3.3 72 h

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9573.510	7	1367.644	37.695	.000
Within Groups	290.256	8	36.282		
Total	9863.766	15			

Duncan[a]

		Subset for alpha = 0.05				
TLPE extract	N	1	2	3	4	5
30	2	12.2630				
15	2		38.9850			
12	2		49.5545	49.5545		
10	2			62.6040	62.6040	
9	2			63.1185	63.1185	
7.5	2				68.3125	
3.75	2				76.7465	
solvent control	2					100.0000
Sig.		1.000	.117	.063	.059	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2. SPSS data of cell cycle arrest analysis on KKU-M213B, KKU-100, and H69 cell lines.

2.1 KKU-M213B cells

2.1.1 SubG1 phase

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	197.994	3	65.998	28.401	.004
Within Groups	9.295	4	2.324		
Total	207.289	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	6.6000		
31.25	2		12.2500	
62.5	2			17.0500
125	2			19.6500
Sig.		1.000	1.000	.163

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.1.2 G0/G1 phase

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	147.724	3	49.241	37.128	.002
Within Groups	5.305	4	1.326		
Total	153.029	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
125	2	67.9000	
62.5	2		77.2500
31.25	2		77.4000
solvent control	2		78.6000
Sig.		1.000	.312

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.1.3 S phase

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.664	3	2.221	6.415	.052
Within Groups	1.385	4	.346		
Total	8.049	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
62.5	2	2.9000	
31.25	2	4.4000	4.4000
solvent control	2	4.5000	4.5000
125	2		5.4500
Sig.		.056	.154

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.1.4 G2/M phase

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	58.650	3	19.550	9.082	.029
Within Groups	8.610	4	2.153		
Total	67.260	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
62.5	2	2.7000	
31.25	2	5.8500	
125	2	6.7500	6.7500
solvent control	2		10.3000
Sig.		.054	.073

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.2 KKU-100 cells

2.2.1 SubG1 phase

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	55.634	3	18.545	449.566	.000
Within Groups	.165	4	.041		
Total	55.799	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	.8000		
31.25	2	1.3000	1.3000	
62.5	2		1.6500	
125	2			7.3000
Sig.		.070	.160	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.2.2 G0/G1 phase

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	202.690	3	67.563	34.166	.003
Within Groups	7.910	4	1.977		
Total	210.600	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
solvent control	2	72.0000	
31.25	2		82.9000
62.5	2		83.1500
125	2		84.5500
Sig.		1.000	.312

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.2.3 S phase

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	72.024	3	24.008	35.241	.002
Within Groups	2.725	4	.681		
Total	74.749	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
125	2	3.9500		
62.5	2		6.4000	
31.25	2		7.9000	
solvent control	2			12.2000
Sig.		1.000	.143	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.2.4 G2/M phase

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	110.704	3	36.901	13.316	.015
Within Groups	11.085	4	2.771		
Total	121.789	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
125	2	4.2000	
62.5	2	7.4500	
31.25	2	7.5000	
solvent control	2		14.4000
Sig.		.124	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.3 H69 cells

2.3.1 SubG1

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	38.925	3	12.975	21.535	.006
Within Groups	2.410	4	.603		
Total	41.335	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE	N	1	2
solvent control	2	3.7000	
31.25	2		7.3500
62.5	2		8.5000
125	2		9.5500
Sig.		1.000	.050

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.3.2 G0/G1 phase

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.084	3	9.361	1.407	.363
Within Groups	26.605	4	6.651		
Total	54.689	7			

Duncan[a]

		Subset for alpha = 0.05
TLPE extract	N	1
solvent control	2	46.2500
31.25	2	48.4000
125	2	49.1000
62.5	2	51.5000
Sig.		.117

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.3.3 S phase

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.664	3	.221	.009	.999
Within Groups	103.645	4	25.911		
Total	104.309	7			

Duncan[a]

TLPE extract	N	Subset for alpha = 0.05 1
62.5	2	14.5000
solvent control	2	14.8500
31.25	2	15.0000
125	2	15.3000
Sig.		.883

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

2.3.4 G2/M phase

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	79.495	3	26.498	.579	.659
Within Groups	183.000	4	45.750		
Total	262.495	7			

Duncan[a]

		Subset for alpha = 0.05
TLPE extract	N	1
62.5	2	23.7000
125	2	24.1000
31.25	2	26.9000
solvent control	2	31.6000
Sig.		.312

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

3. SPSS data of apoptosis analysis on KKU-M213B, KKU-100, and H69 cell lines.

3.1 KKU-M213B cells

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	434.674	4	108.669	20.870	.003
Within Groups	26.035	5	5.207		
Total	460.709	9			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	5.5000		
31.25	2		12.0500	
62.5	2		15.5500	
camp	2		16.6000	
125	2			25.7500
Sig.		1.000	.110	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

3.2 KKU-100 cells

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1245.914	4	311.478	29.137	.001
Within Groups	53.450	5	10.690		
Total	1299.364	9			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	5.7000		
31.25	2	10.4500	10.4500	
62.5	2	11.7000	11.7000	
125	2		17.7500	
camp	2			37.6000
Sig.		.134	.082	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

3.3 H69 cells

ANOVA

H69 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	267.396	4	66.849	52.389	.000
Within Groups	6.380	5	1.276		
Total	273.776	9			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	3.5500		
31.25	2	4.9000	4.9000	
62.5	2	6.3500	6.3500	
125	2		7.2500	
camp	2			18.0500
Sig.		.061	.099	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4. SPSS data of western blot analysis on KKU-M213B and KKU-100 cell lines.

4.1 KKU-M213B cells

4.1.1 Ac-H3

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.599	3	.200	28.285	.004
Within Groups	.028	4	.007		
Total	.628	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
31.25	2	.9145		
solvent control	2	1.0000	1.0000	
62.5	2		1.1675	
125	2			1.6235
Sig.		.367	.117	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.1.2 P21

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.000	3	.000	.	.
Within Groups	.000	4	.000		
Total	.000	7			

4.1.3 CDK4

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.096	3	.032	183.899	.000
Within Groups	.001	4	.000		
Total	.096	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
125	2	.7200		
62.5	2	.7475		
31.25	2		.8040	
solvent control	2			1.0000
Sig.		.105	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.1.4 P53

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.691	3	.230	14.130	.014
Within Groups	.065	4	.016		
Total	.756	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
125	2	.2580	
62.5	2	.5275	
31.25	2		.8855
solvent control	2		1.0000
Sig.		.102	.420

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.1.5 Bax

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.202	3	.067	1.525	.338
Within Groups	.176	4	.044		
Total	.378	7			

Duncan[a]

factor	N	Subset for alpha = 0.05
		1
4.00	2	.6110
3.00	2	.6120
2.00	2	.7575
1.00	2	1.0000
Sig.		.143

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.1.6 Bcl2

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.027	3	.342	6.414	.052
Within Groups	.214	4	.053		
Total	1.241	7			

Duncan[a]

		Subset for alpha = 0.05	
factor	N	1	2
4.00	2	.0925	
3.00	2	.5610	.5610
2.00	2		.9195
1.00	2		1.0000
Sig.		.113	.135

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.1.7 pERK

ANOVA

KKU-M213B cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.358	3	.119	48.030	.001
Within Groups	.010	4	.002		
Total	.368	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
125	2	.5100	
62.5	2	.6330	
31.25	2		.9700
solvent control	2		1.0000
Sig.		.069	.580

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2 KKU-100 cells

4.2.1 Ac-H3

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	94.069	3	31.356	89.174	.000
Within Groups	1.407	4	.352		
Total	95.475	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
solvent control	2	1.0000	
31.25	2	1.0550	
62.5	2	2.5110	
125	2		9.3165
Sig.		.067	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2.2 P21

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	73.876	3	24.625	121.567	.000
Within Groups	.810	4	.203		
Total	74.686	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	1.0000		
31.25	2	1.9975	1.9975	
62.5	2		3.0800	
125	2			8.8350
Sig.		.091	.074	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2.3 CDK4

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.335	3	.112	10.871	.022
Within Groups	.041	4	.010		
Total	.376	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
125	2	.5055	
62.5	2	.5230	
31.25	2	.7915	.7915
solvent control	2		1.0000
Sig.		.051	.109

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2.4 P53

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.337	3	.112	2.280	.221
Within Groups	.197	4	.049		
Total	.534	7			

Duncan[a]

TLPE extract	N	Subset for alpha = 0.05 1
125	2	.4740
62.5	2	.5530
31.25	2	.7770
solvent control	2	1.0000
Sig.		.082

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2.5 Bax

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.831	3	1.277	44.506	.002
Within Groups	.115	4	.029		
Total	3.946	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
solvent control	2	1.0000		
31.25	2	1.2705	1.2705	
62.5	2		1.5710	
125	2			2.8090
Sig.		.186	.151	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2.6 Bcl2

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.458	3	.153	5.490	.067
Within Groups	.111	4	.028		
Total	.569	7			

Duncan[a]

		Subset for alpha = 0.05	
TLPE extract	N	1	2
125	2	.5750	
62.5	2	.6490	
solvent control	2	1.0000	1.0000
31.25	2		1.1510
Sig.		.067	.416

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.2.7 pERK

ANOVA

KKU-100 cells

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.549	3	.183	104.340	.000
Within Groups	.007	4	.002		
Total	.556	7			

Duncan[a]

		Subset for alpha = 0.05		
TLPE extract	N	1	2	3
125	2	.3485		
62.5	2		.7530	
31.25	2			.9785
solvent control	2			1.0000
Sig.		1.000	1.000	.635

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

4.3 Bax/Bcl2 ratio of KKU-M213B cells

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	45.501	3	15.167	18.833	.008
Within Groups	3.221	4	.805		
Total	48.723	7			

Duncan[a]

		Subset for alpha = 0.05	
factor	N	1	2
2.00	2	.8325	
1.00	2	1.0000	
3.00	2	1.1800	
4.00	2		6.5045
Sig.		.721	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.