

Figure S1. DPSE efficiently induces cell death in DLBCL. DHL4, Ly1, Ly8 and HBL1 on DLBCL were treated with DPSE (0 or 1 mg/ml) for 24 h, and the apoptotic rate was measured by Annexin V/PI staining and flow cytometric analysis. A representative of three independent experiments is shown. DPSE, *Dracocephalum palmatum* Stephan extract; DLBCL, diffuse large B cell lymphoma cell.

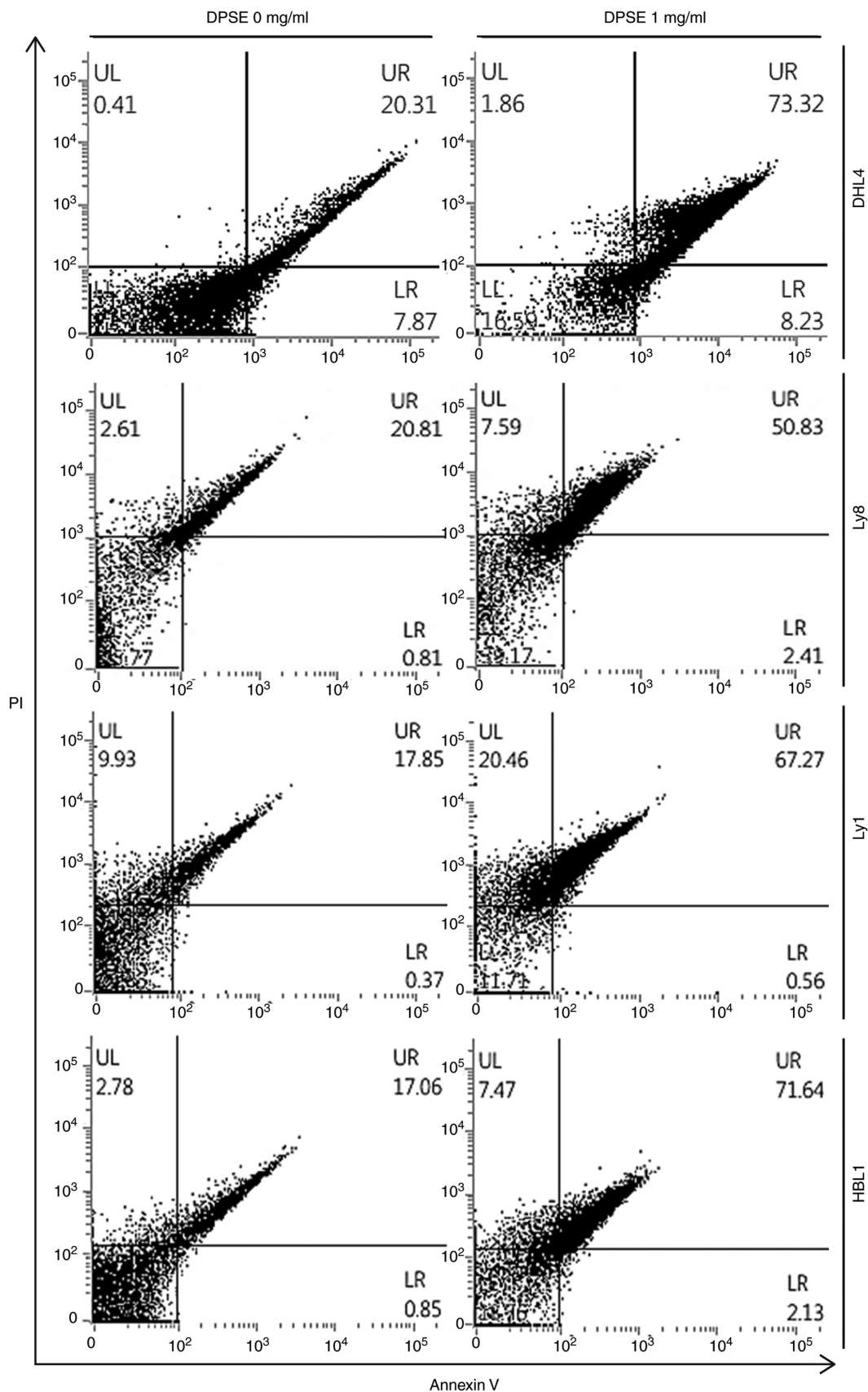


Figure S2. DPSE does not induce cell death in normal murine cells. SPL and BM cells from normal C57BL/6 mice were exposed to DPSE (0 or 1 mg/ml) for 24 h, followed by the measurement of apoptotic rate by flow cytometric analysis. DPSE has minimal cytotoxic effect on normal murine cells. SPL, splenocyte; BM, bone marrow; DPSE, *Dracocephalum palmatum* Stephan extract.

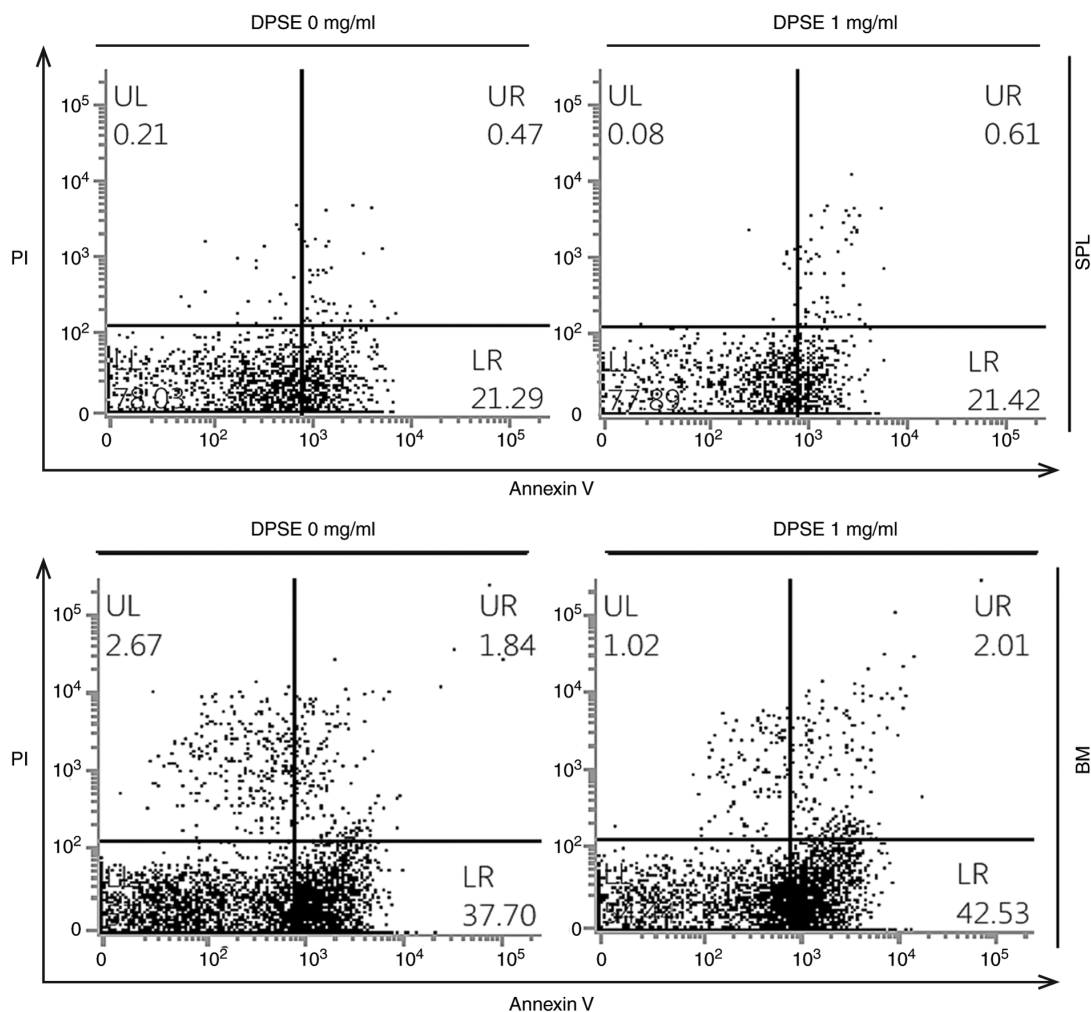


Figure S3. Analysis of Myc mRNA and protein expression levels in Ly1 CDH and CDH-Myc cells. Myc and mRNA protein levels of Ly1 CDH-control or CDH-Myc cells were examined by western blotting and reverse transcription-quantitative PCR, respectively. * $P < 0.05$ vs. Ly1 CDH. CDH, vector.

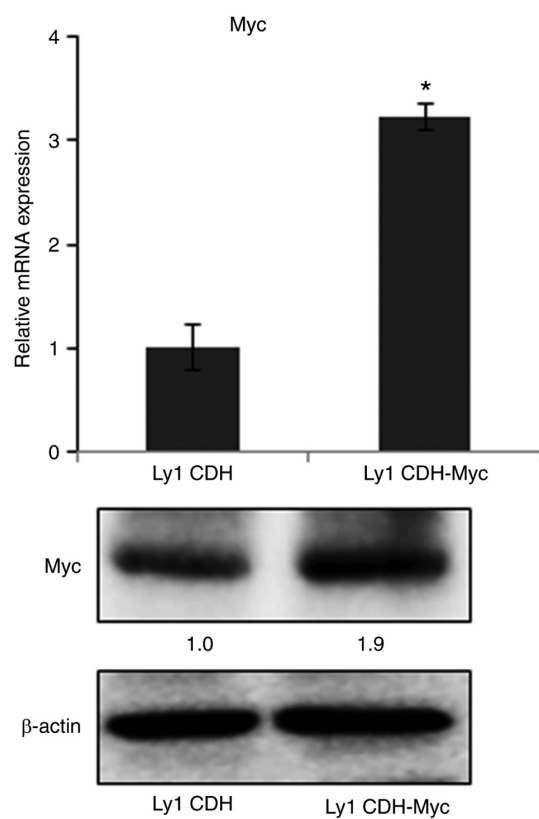


Figure S4. Cytotoxic effect of terpenoid fractions. DHL4 and Ly1 diffuse large B cell lymphoma cells were treated with six terpenoid fractions (1T-6T) of *Dracocephalum palmatum* Stephan extract obtained from thin layer chromatography (0, 100 or 200 $\mu\text{g/ml}$ for 24 h), and cell viability was analyzed by MTS assays. Terpenoids has no or minimal cytotoxic effect on DHL4 and Ly1 cells.

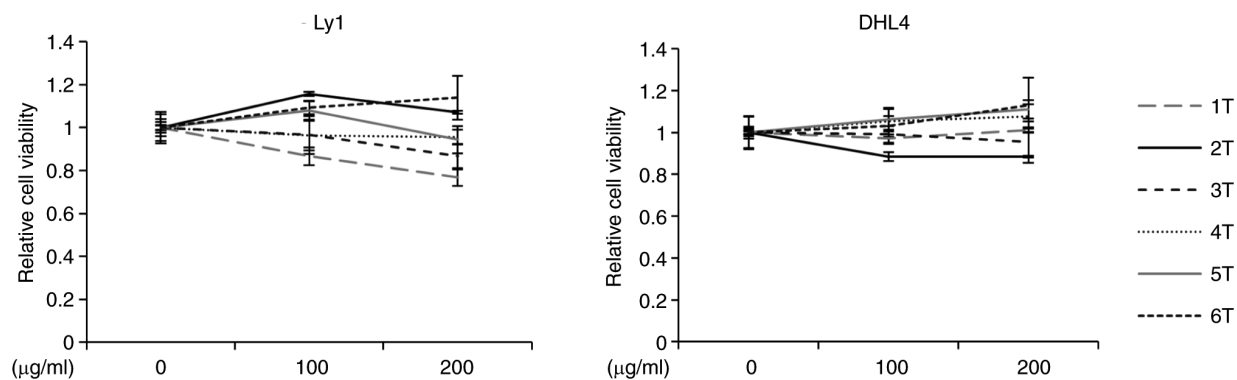


Figure S5. Cytotoxic effect of flavonoid fractions. DHL4 diffuse large B cell lymphoma cells were exposed to six flavonoid fractions (1F-6F) of *Dracocephalum palmatum* Stephan extract obtained from thin layer chromatography (0, 100 or 200 $\mu\text{g/ml}$ for 24 h), and MTS assays were performed to measure cell viability. 6F, but not others, exhibited a strong cytotoxic effect on DHL4 cells. * $P < 0.05$ vs. 0 $\mu\text{g/ml}$.

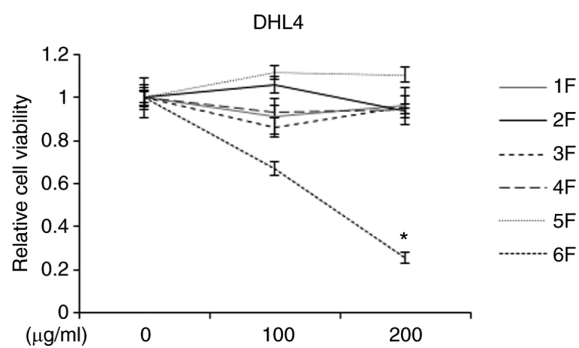


Figure S6. Analysis of apoptotic fractions by Annexin V/PI staining. Ly1 diffuse large B cell lymphoma cells were treated with 6F (0 or 200 $\mu\text{g/ml}$ for 24 h) followed by FACS analysis of apoptotic fractions (Annexin V/PI-positive).

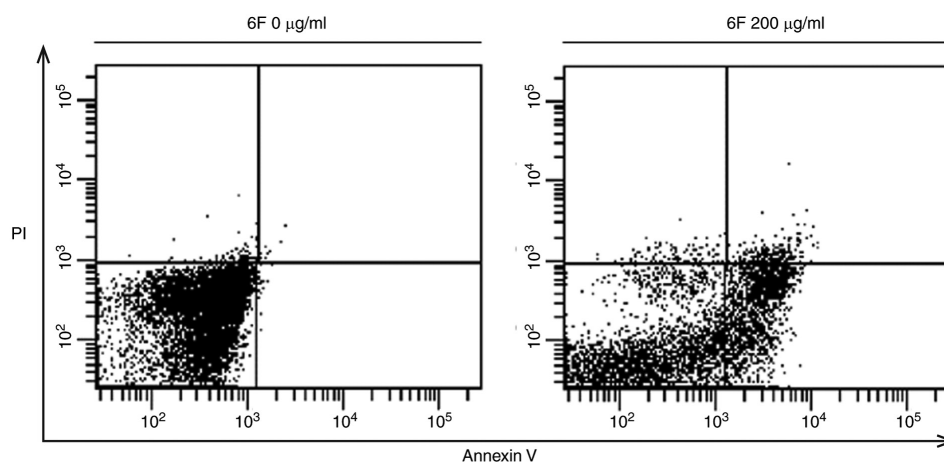


Figure S7. Effect of DPSE on p53 expression. Ly1 and HBL1 diffuse large B cell lymphoma cells were exposed to DPSE (0 or 1 mg/ml for 4 h) and western blotting was performed to analyze the expression of p53 tumor suppressor protein. *P<0.05 vs. 0 mg/ml DPSE. DPSE, *Dracocephalum palmatum* Stephan extract.

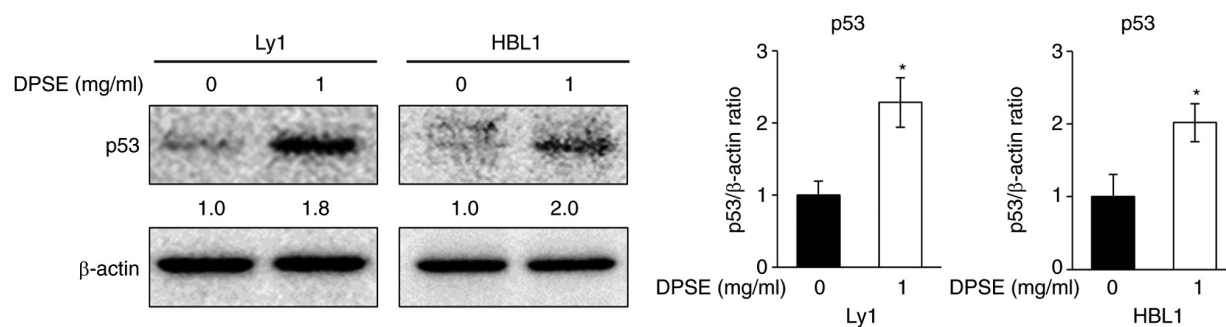


Table SI. List of integrated peaks.

Start	Retention time, min	End	Height	Area	Area, %
0.81	0.877	0.943	2006678	6130154	15.03
5.686	5.78	6.013	1307108	6950123	17.04
8.295	8.556	8.761	1285657	13042945	31.97
8.761	8.921	9.259	4361334	40797045	100
9.398	9.62	9.703	1729533	13600475	33.34
9.897	9.974	10.395	1025095	6074092	14.89
10.672	10.733	11.309	900810	11946008	29.28
11.309	11.381	11.736	3491230	20088525	49.24
11.919	12.002	12.152	1501648	6057826	14.85