Electronic Supplementary Material (ESI) for RSC Advances

Supporting Information

Anti-inflammatory terpenoids from *Boswellia ovalifoliolata*

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Cell lines, growth medium and treatment conditions. Human cancer cell line i.e., Leukemia (THP-1), Lung (A-549) and Colon (COLO-205) were procured from European Collection of cell culture (ECACC), UK. Cells were grown in RPMI-1640 medium supplemented with 10 % FCS and 1 % penicillin. Penicillin was dissolved in PBS and sterilized by filtering through 0.2µm filter in laminar air flow hood. Cells were cultured in CO_2 incubator (New Brunswick, Galaxy 170R, Eppendroff) with an internal atmosphere of 95 % air and 5 % CO_2 gas and the cell lines were maintained at 37^0C. The media was stored at low temperature (2-8^{o}C). The medium for cryopreservation contained 20% FCS and 10% DMSO in growth medium.

Cell Cytotoxicity assay. SRB assay was performed in which cell suspension of optimum cell density was seeded and exposed to 1, 10 and 100 µM concentrations of **2** and **5** in the culture medium. The cells were incubated with test samples for 48 h. Then the cells were fixed by adding trichloroacetic acid for 1 h at 4 ^{o}C. After 1 h the plates were washed five times with distilled water and allowed to dry in air. This was followed by the addition of 100 µL of 0.4% sulphorhodamine (SRB) dye for 0.5 h at room temperature. Plates were then washed with 1% v/v acetic acid to remove the unbound SRB. The bound dye was solublized by adding 100 µL of 10 mM Tris buffer (pH = 10.05) to each well. The plates were put on the shaker platform for 5 min to solublize the dye completely, and finally the reading was taken at 540 nm (Houghton et al., *Method*, 2007, **42**, 377-387).

Table 1. *In vitro* Cytotoxicity of compound 2 and 5 against human cancer cell lines

Cell line Type		LEUKEMIA	LUNG	COLON
		THP-1	A-549	COLO-205
Compound	Conc. (µM)	% GROWTH INHIBITION		
2	1	1	5	0
	10	9	12	5
	100	77	81	11
5	1	0	3	0
	10	1	10	0
	100	9	67	6
Mytomycin-C	1×10^{-6}	37	56	34
5-FU	1×10^{-5}	24	12	69

Table 2. List of known compounds and their references

Entry	Compound no. in manuscript	Reference
1	**4**	*J. Chin. Pharm. Sci.*, **2008**, 144-147.
2	**5,6,7**	*Indian J. Chem., Sect. B*, **1978**, 176.
3	**8**	*Agric. Biol. Chem*., **1961**, 517-518.
4	**9**	*Nat. Prod. Rep*., **2009**, 72–89.
5	**10**	*a) Phytochemistry*, **1969**, 669. b) *Phytochemistry* **1995**, 453.

Spectral Graphs: