

Tables:

Group number	Cells	LPS 100 ng/mL	Alcoholic extract of Stachys lavandulifolia	Dexamethasone	Ibuprofen	Dimethyl sulfoxide
1	10x10 ⁶	Negative	Negative	Negative	Negative	Negative
2	10x10 ⁶	Negative	positive	Negative	Negative	Negative
3	10x10 ⁶	positive	Negative	Negative	Negative	Negative
4	10x10 ⁶	positive	positive	Negative	Negative	Negative
5	10x10 ⁶	positive	Negative	positive	Negative	Negative
6	10x10 ⁶	positive	Negative	Negative	positive	Negative
7	10x10 ⁶	positive	Negative	Negative	Negative	positive
8	10x10 ⁶	Negative	Negative	Negative	Negative	positive

Table 1: Classification of study groups

Gene Bank id	Gene	Forward Primer	Reverse Primer	PCR Product Size
NM_174445.2	Bovine COX-2	GGTGCCTGGTCTGATGATGT	AGCCACTCAAGTGTGTACG	175
DQ676956.1	Bovine iNOS	TCCCAAAAGGTGGACTTGGC	GTGACGTTTGGGGTCATCCT	105
NM_174093.1	Bovine iL-1 β	TCTTCGAAACGTCCTCCGAC	AGCCAGCACCAGGGATTTT	98
NM_173923.2	Bovine iL-6	GCGCATGGTCGACAAAATCT	CCAGTGTCTCCTTGCTGCTT	83
Z14137.1	Bovine TNF- α	ACTCCTTGAACCTTCTGGGGC	TCCCATGTCCTAAGGGAGAGG	114
NM_001034034.2	Bovine GAPDH	AAGGTCGGAGTGAACGGATTC	ATTGATGGCGACGATGTCCA	90
X04430.1	Human TNF- α	GGACTGGAGATGTCTGAGGC	GCTCCTGGAGGGGAGATAGA	83
X12830.1	Human iL-6	CGTAACCGCACCCCTGGGAC	CGGCTCTCTACACACTGC	192
XM_011542805.2	Human iL-18	TGCAGTCTACACAGCTTCGG	AAGCAAAGAGCCATCTGCGA	97
X01677.1	Human GAPDH	CTGACTTCAACAGCGACACC	GTGGTCCAGGGTCTTACTC	172

Table 2: The sequence of primer nucleotides for Bovine proinflammatory cytokine COX-2, iNOS, iL-1 beta, iL-6, TNF- α and GAPDH and Human TNF- α , iL-18, iL-6 and GAPDH

NO	Chemical Name	Percentage	NO	Chemical Name	Percentage
1	Phenol	8.17	20	Benzofuran	1.82
2	sabbinene	7.19	21	Enoic acid	1.73
3	1-Methyl-pyrrolidine-2-carboxylic	5.44	22	2-Pentylpyrazine	1.72
4	β -pinene	5.26	23	2-Propen-1-ol	1.63
5	Myrcene	5.68	24	Benzoic acid	1.45
6	2-Furancarboxaldehyde	5.42	25	4-Pyridinamine	1.41
7	Pyran	4.42	26	Phenic acid	1.39
8	Myristicine	4.11	27	1,2-Cyclopentanedione	1.34
9	Phenol,4-ethenyl-2- methoxy	3.39	28	Benzeneacetic acid	1.31
10	Vinyl phenol	3.16	29	Pyridinium	1.22
11	Myrcenen	3.11	30	Camphene	1.24
12	4,7-Methano	2.74	31	Benzenol	1.18
13	-Furanmethanol	2.51	32	1H-Pyrrole-2- carboxylic acid	1.18
14	2(3H)-Furanone	2.48	33	Acetic acid	1.34
15	α -pinene	2.35	34	Urea	1.09
16	Pamolyn	2.21	35	Phenylethanoid	0.87
17	Thymol	2.12	36	2-Hexadecen-1-ol	0.51
18	4H-Pyran-4-one	2.84	37	9-Octadecenoic acid	0.37
19	Hydrazine	1.92	38	Difluorobenzene,1-methoxy	0.12

Table3. Chemical composition of the hydroalcoholic extract of *S. lavandulifolia Vahl* from Tehran province

Column1	Column2	Column	Column	Column	Column
		TNF- α	IL-1 β	COX-2	iNOS
Cell*	Group 1	23.15 \pm 2.9	25.59 \pm 2.8	26.21 \pm 2.9	24.57 \pm 2.7
Cell+AELS *	Group 2	23.98 \pm 2.6	26.1 \pm 2.9	26.98 \pm 2.8	24.89 \pm 2.5
Cell+LPS**	Group 3	84.48 \pm 3.1	89.42 \pm 3.4	85.99 \pm 3.3	91.06 \pm 3.2
Cell+LPS+AELS**	Group 4	41.24 \pm 3.4	47.12 \pm 3.1	44.92 \pm 3.2	45.34 \pm 3.3
Cell+LPS+Dexamethazone**	Group 5	25.57 \pm 4.1	27.01 \pm 4.4	27.85 \pm 4.6	29.1 \pm 4.1
Cell+LPS+NSAIDs**	Group 6	30.94 \pm 4.3	40.9 \pm 4.2	30.22 \pm 4.6	34.54 \pm 4.3
Cell+LPS+DMSO*	Group 7	89.29 \pm 2.8	87.33 \pm 2.9	84.34 \pm 2.6	93.87 \pm 2.5
Cell+DMSO*	Group 8	23.98 \pm 2.7	26.1 \pm 2.8	26.98 \pm 2.9	24.89 \pm 2.6

Table 4: The effect of AELS on proinflammatory gene expression in BFLS, using semiquantitative RT-PCR. BFLSc were incubated with AELS for 72 h and activated with LPS for 1 h. Normalized gene expression is shown as percent of activated control (C + LPS). *P < 0.05; **P < 0.001.

Column1	Column2	Column3	Column4	Column5
		TNF-α	IL-16	iL-18
Cell*	Group 1	21.15\pm4.4	25.59\pm4.3	24.98\pm3.8
Cell+AELS *	Group 2	23.98\pm3.9	26.1\pm3.8	25.12\pm3.5
Cell+LPS**	Group 3	94.48\pm3.5	92.42\pm3.6	92.45\pm3.9
Cell+LPS+AELS**	Group 4	56.8\pm4.1	58.04\pm4.2	52.59\pm4.8
l+LPS+Dexamethazon	Group 5	24.64\pm4.5	27.38\pm4.1	28.12\pm4.5
Cell+LPS+NSAIDs**	Group 6	27.66\pm3.6	29.84\pm3.5	31.34\pm3.9
Cell+LPS+DMSO*	Group 7	93.29\pm3.8	91.33\pm3.2	92.89\pm3.7
Cell+DMSO*	Group 8	21.98\pm3.1	26.45\pm3.4	25.15\pm3.6

Table 5: The effect of ASEL on proinflammatory gene expression in THP-1 cells using semiquantitative RT-PCR analysis. THP-1 cells were incubated with ASU for 72 h and activated with LPS for 1 h. Normalized gene expression is shown as percent of activated control (C + LPS). *P < 0.05; **P < 0.001.