

Table SI. Sequences of used primers for RT-PCR experiments *in vitro* and *in vivo*.

Sequences	Primers
5'-CCCCAAAGGGATGAGAAGTT-3'	TNF- α _Forward
5'-CACTTGGTGGTTTGCTACGA-3'	TNF- α _Reverse
5'-CGACAGCATGGTTCTTCTCA-3'	TSLP_Forward
5'-CGATTTGCTCGAACTTAGCC-3'	TSLP_Reverse
5'-GGGCCTCAAAGGAAAGAATC-3'	IL-1 β _Forward
5'-TACCAGTTGGGGAAGCTCTGC-3'	IL-1 β _Reverse
5'-ACAAC TTTGGCCGACTTCAC-3'	IL-18_Forward
5'-GGGTTCACTGGCACTTTGAT-3'	IL-18_Reverse
5'-AATAATGTGCCCGTATCCA-3'	IL-23_Forward
5'-CTGGAGGAGTTGGCTGAGTC-3'	IL-23_Reverse
5'-GCTCCAGAAGGCCCTCAGA-3'	IL-17 α _Forward
5'-AGCTTCCCTCCGCATTGA-3'	IL-17 α _Reverse
5'-GGCTGTATTCCCCTCCATCG-3'	Actin_Forward
5'-CCAGTTGGTAACAATGCCATGT-3'	Actin_Reverse

Table SII. Statistical analysis of the results of RT-PCR for the mRNA levels of IL-1 β , IL-23, IL-18 and TNF- α in the LPS-stimulated J774.A1 M ϕ s following treatment with (0.1-1.75 mM) BAT or (100-200 mM) taurine for 1.5 h.

A, IL-1 β	
Statistical comparison of samples	P-value
NC vs. LPS	d
NC vs. 0.1 mM BAT	c
NC vs. 0.3 mM BAT	c
NC vs. 0.5 mM BAT	c
NC vs. 1 mM BAT	c
NC vs. 1.75 mM BAT	ns
NC vs. 100 mM taurine	c
NC vs. 200 mM taurine	a
LPS vs. 0.1 mM BAT	d
LPS vs. 0.3 mM BAT	d
LPS vs. 0.5 mM BAT	d
LPS vs. 1 mM BAT	d
LPS vs. 1.75 mM BAT	d
LPS vs. 100 mM taurine	d
LPS vs. 200 mM taurine	d
0.1 mM BAT vs. 0.3 mM BAT	ns
0.1 mM BAT vs. 0.5 mM BAT	ns
0.1 mM BAT vs. 1 mM BAT	ns
0.1 mM BAT vs. 1.75 mM BAT	b
0.1 mM BAT vs. 100 mM taurine	ns
0.1 mM BAT vs. 200 mM taurine	ns
0.3 mM BAT vs. 0.5 mM BAT	ns
0.3 mM BAT vs. 1 mM BAT	ns
0.3 mM BAT vs. 1.75 mM BAT	ns
0.3 mM BAT vs. 100 mM taurine	ns
0.3 mM BAT vs. 200 mM taurine	ns
0.5 mM BAT vs. 1 mM BAT	ns
0.5 mM BAT vs. 1.75 mM BAT	ns
0.5 mM BAT vs. 100 mM taurine	ns
0.5 mM BAT vs. 200 mM taurine	ns
1 mM BAT vs. 1.75 mM BAT	ns
1 mM BAT vs. 100 mM taurine	ns
1 mM BAT vs. 200 mM taurine	ns
1.75 mM BAT vs. 100 mM taurine	a
1.75 mM BAT vs. 200 mM taurine	ns
100 mM taurine vs. 200 mM taurine	ns
B, IL-23	
Statistical comparison of samples	P-value
NC vs. LPS	d
NC vs. 0.1 mM BAT	c
NC vs. 0.3 mM BAT	b
NC vs. 0.5 mM BAT	b
NC vs. 1 mM BAT	b
NC vs. 1.75 mM BAT	ns
NC vs. 100 mM taurine	b
NC vs. 200 mM taurine	a
LPS vs. 0.1 mM BAT	d

Table SII. Continued.

B, IL-23	
Statistical comparison of samples	P-value
LPS vs. 0.3 mM BAT	d
LPS vs. 0.5 mM BAT	d
LPS vs. 1 mM BAT	d
LPS vs. 1.75 mM BAT	d
LPS vs. 100 mM taurine	d
LPS vs. 200 mM taurine	d
0.1 mM BAT vs. 0.3 mM BAT	ns
0.1 mM BAT vs. 0.5 mM BAT	ns
0.1 mM BAT vs. 1 mM BAT	ns
0.1 mM BAT vs. 1.75 mM BAT	ns
0.1 mM BAT vs. 100 mM taurine	ns
0.1 mM BAT vs. 200 mM taurine	ns
0.3 mM BAT vs. 0.5 mM BAT	ns
0.3 mM BAT vs. 1 mM BAT	ns
0.3 mM BAT vs. 1.75 mM BAT	ns
0.3 mM BAT vs. 100 mM taurine	ns
0.3 mM BAT vs. 200 mM taurine	ns
0.5 mM BAT vs. 1 mM BAT	ns
0.5 mM BAT vs. 1.75 mM BAT	ns
0.5 mM BAT vs. 100 mM taurine	ns
0.5 mM BAT vs. 200 mM taurine	ns
1 mM BAT vs. 1.75 mM BAT	ns
1 mM BAT vs. 100 mM taurine	ns
1 mM BAT vs. 200 mM taurine	ns
1.75 mM BAT vs. 100 mM taurine	ns
1.75 mM BAT vs. 200 mM taurine	ns
100 mM taurine vs. 200 mM taurine	ns
C, IL-18	
Statistical comparison of samples	P-value
NC vs. LPS	d
NC vs. 0.1 mM BAT	d
NC vs. 0.3 mM BAT	c
NC vs. 0.5 mM BAT	ns
NC vs. 1 mM BAT	ns
NC vs. 1.75 mM BAT	ns
NC vs. 100 mM taurine	d
NC vs. 200 mM taurine	ns
LPS vs. 0.1 mM BAT	ns
LPS vs. 0.3 mM BAT	ns
LPS vs. 0.5 mM BAT	c
LPS vs. 1 mM BAT	d
LPS vs. 1.75 mM BAT	d
LPS vs. 100 mM taurine	ns
LPS vs. 200 mM taurine	d
0.1 mM BAT vs. 0.3 mM BAT	ns
0.1 mM BAT vs. 0.5 mM BAT	b
0.1 mM BAT vs. 1 mM BAT	c
0.1 mM BAT vs. 1.75 mM BAT	d
0.1 mM BAT vs. 100 mM taurine	ns
0.1 mM BAT vs. 200 mM taurine	c

Table SII. Continued.

C, IL-18	
Statistical comparison of samples	P-value
0.3 mM BAT vs. 0.5 mM BAT	ns
0.3 mM BAT vs. 1 mM BAT	^b
0.3 mM BAT vs. 1.75 mM BAT	^d
0.3 mM BAT vs. 100 mM taurine	ns
0.3 mM BAT vs. 200 mM taurine	^a
0.5 mM BAT vs. 1 mM BAT	ns
0.5 mM BAT vs. 1.75 mM BAT	^a
0.5 mM BAT vs. 100 mM taurine	^b
0.5 mM BAT vs. 200 mM taurine	ns
1 mM BAT vs. 1.75 mM BAT	ns
1 mM BAT vs. 100 mM taurine	^c
1 mM BAT vs. 200 mM taurine	ns
1.75 mM BAT vs. 100 mM taurine	^d
1.75 mM BAT vs. 200 mM taurine	^a
100 mM taurine vs. 200 mM taurine	^c

D, TNF- α

Statistical comparison of samples	P-value
NC vs. LPS	^d
NC vs. 0.1 mM BAT	^b
NC vs. 0.3 mM BAT	ns
NC vs. 0.5 mM BAT	ns
NC vs. 1 mM BAT	ns
NC vs. 1.75 mM BAT	ns
NC vs. 100 mM taurine	ns
NC vs. 200 mM taurine	ns
LPS vs. 0.1 mM BAT	^c
LPS vs. 0.3 mM BAT	^d
LPS vs. 0.5 mM BAT	^d
LPS vs. 1 mM BAT	^d
LPS vs. 1.75 mM BAT	^d
LPS vs. 100 mM taurine	^d
LPS vs. 200 mM taurine	^d
0.1 mM BAT vs. 0.3 mM BAT	ns
0.1 mM BAT vs. 0.5 mM BAT	ns
0.1 mM BAT vs. 1 mM BAT	^a
0.1 mM BAT vs. 1.75 mM BAT	^b
0.1 mM BAT vs. 100 mM taurine	^a
0.1 mM BAT vs. 200 mM taurine	^a
0.3 mM BAT vs. 0.5 mM BAT	ns
0.3 mM BAT vs. 1 mM BAT	ns
0.3 mM BAT vs. 1.75 mM BAT	ns
0.3 mM BAT vs. 100 mM taurine	ns
0.3 mM BAT vs. 200 mM taurine	ns
0.5 mM BAT vs. 1 mM BAT	ns
0.5 mM BAT vs. 1.75 mM BAT	ns
0.5 mM BAT vs. 100 mM taurine	ns
0.5 mM BAT vs. 200 mM taurine	ns
1 mM BAT vs. 1.75 mM BAT	ns
1 mM BAT vs. 100 mM taurine	ns
1 mM BAT vs. 200 mM taurine	ns

Table SII. Continued.

D, TNF- α	
Statistical comparison of samples	P-value
1.75 mM BAT vs. 100 mM taurine	ns
1.75 mM BAT vs. 200 mM taurine	ns
100 mM taurine vs. 200 mM taurine	ns

Data are presented as the means \pm SEM of 3 independent experiments. One-way ANOVA followed by Tukey's multiple comparison test revealed the statistically significant differences between the LPS alone-treated J774.A1 M ϕ s with the LPS/BAT-treated M ϕ s and LPS/taurine-treated M ϕ s. Statistical analysis revealed the comparison of BAT and taurine-treated M ϕ s with the LPS-treated M ϕ s; ns, not significant, ^aP<0.05, ^bP<0.01, ^cP<0.001, ^dP<0.0001. M ϕ s, macrophages; LPS, lipopolysaccharide; BAT, bromamine T.

Table SIII. Statistical analysis of RT-PCR analysis of total cell distribution derived from the connective tissue, PMN distribution derived from the connective tissue, total cell distribution derived from the synovial membrane, PMN distribution derived from the synovial membrane and pouch wall thickness in (3 or 6 or 9 mg) BAT or (9 mg) taurine-treated LPS-exposed mice with an air pouch compared to LPS-exposed mice bearing an air pouch.

A, Total cell distribution derived from the connective tissue	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	a
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	c
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	b
BAT (3 mg) vs. BAT (6 mg)	ns
BAT (3 mg) vs. BAT (9 mg)	b
BAT (3 mg) vs. taurine (9 mg)	ns
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns
B, PMN distribution derived from the connective tissue	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	d
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	a
LPS vs. BAT (6 mg)	d
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	d
BAT (3 mg) vs. BAT (6 mg)	d
BAT (3 mg) vs. BAT (9 mg)	d
BAT (3 mg) vs. taurine (9 mg)	d
BAT (6 mg) vs. BAT (9 mg)	d
BAT (6 mg) vs. taurine (9 mg)	c
BAT (9 mg) vs. taurine (9 mg)	ns
C, Total cell distribution derived from the synovial membrane	
Statistical comparison of groups	P-value
NC vs. LPS	a
NC vs. BAT (3 mg)	ns
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	a
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	c
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	d
BAT (3 mg) vs. BAT (6 mg)	ns
BAT (3 mg) vs. BAT (9 mg)	b
BAT (3 mg) vs. taurine (9 mg)	b
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns

Table SIII. Continued.

C, Total cell distribution derived from the synovial membrane	
Statistical comparison of groups	P-value
LPS vs. taurine (9 mg)	c
BAT (3 mg) vs. BAT (6 mg)	ns
BAT (3 mg) vs. BAT (9 mg)	b
BAT (3 mg) vs. taurine (9 mg)	ns
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns
D, PMN distribution derived from the synovial membrane	
Statistical comparison of groups	P-value
NC vs. LPS	b
NC vs. BAT (3 mg)	ns
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	b
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	c
BAT (3 mg) vs. BAT (6 mg)	ns
BAT (3 mg) vs. BAT (9 mg)	c
BAT (3 mg) vs. taurine (9 mg)	a
BAT (6 mg) vs. BAT (9 mg)	b
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	Ns
E, Pouch wall thickness	
Statistical comparison of groups	P-value
NC vs. LPS	a
NC vs. BAT (3 mg)	ns
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	c
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	c
BAT (3 mg) vs. BAT (6 mg)	ns
BAT (3 mg) vs. BAT (9 mg)	b
BAT (3 mg) vs. taurine (9 mg)	b
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns

Data were presented as the mean \pm SEM. One-way ANOVA followed by Tukey's multiple comparisons test revealed the statistically significant differences between the LPS-treated group with LPS/BAT-treated group and LPS/taurine-treated group. Statistical analysis revealed the comparison of LPS plus BAT and LPS/taurine-treated group with the LPS-treated group; ns, not significant, ^aP<0.05, ^bP<0.01, ^cP<0.001, ^dP<0.0001. LPS, lipopolysaccharide; BAT, bromamine T; PMN, polymorphonuclear cell.

Table SIV. Statistical analysis of the RT-PCR analysis of IL-1 β , IL-23, IL-18, IL-17, TNF- α and TSLP in (3 or 6 or 9 mg) BAT or (9 mg) taurine-treated LPS-exposed mice with an air pouch compared to LPS-exposed mice bearing an air pouch.

A, IL-1 β	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	d
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	d
LPS vs. BAT (6 mg)	d
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	d
BAT (3 mg) vs. BAT (6 mg)	c
BAT (3 mg) vs. BAT (9 mg)	d
BAT (3 mg) vs. taurine (9 mg)	d
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns
B, IL-23	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	d
NC vs. BAT (6 mg)	ns
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	d
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	d
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	b
BAT (3 mg) vs. BAT (6 mg)	d
BAT (3 mg) vs. BAT (9 mg)	d
BAT (3 mg) vs. taurine (9 mg)	ns
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	d
BAT (9 mg) vs. taurine (9 mg)	d
C, IL-18	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	d
NC vs. BAT (6 mg)	a
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	d
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	d
BAT (3 mg) vs. BAT (6 mg)	a

Table SIV. Continued.

C, IL-18	
Statistical comparison of groups	P-value
BAT (3 mg) vs. BAT (9 mg)	c
BAT (3 mg) vs. taurine (9 mg)	d
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	a
BAT (9 mg) vs. taurine (9 mg)	ns
D, IL-17	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	c
NC vs. BAT (6 mg)	b
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	a
LPS vs. BAT (6 mg)	b
LPS vs. BAT (9 mg)	c
LPS vs. taurine (9 mg)	c
BAT (3 mg) vs. BAT (6 mg)	ns
BAT (3 mg) vs. BAT (9 mg)	b
BAT (3 mg) vs. taurine (9 mg)	b
BAT (6 mg) vs. BAT (9 mg)	ns
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns
E, TNF- α	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	d
NC vs. BAT (6 mg)	c
NC vs. BAT (9 mg)	ns
NC vs. taurine (9 mg)	a
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	c
LPS vs. BAT (9 mg)	d
LPS vs. taurine (9 mg)	d
BAT (3 mg) vs. BAT (6 mg)	b
BAT (3 mg) vs. BAT (9 mg)	d
BAT (3 mg) vs. taurine (9 mg)	c
BAT (6 mg) vs. BAT (9 mg)	b
BAT (6 mg) vs. taurine (9 mg)	ns
BAT (9 mg) vs. taurine (9 mg)	ns
F, TSLP	
Statistical comparison of groups	P-value
NC vs. LPS	d
NC vs. BAT (3 mg)	d
NC vs. BAT (6 mg)	b
NC vs. BAT (9 mg)	ns

Table SIV. Continued.

F, TSLP

Statistical comparison of groups	P-value
NC vs. taurine (9 mg)	ns
LPS vs. BAT (3 mg)	ns
LPS vs. BAT (6 mg)	^d
LPS vs. BAT (9 mg)	^d
LPS vs. taurine (9 mg)	^d
BAT (3 mg) vs. BAT (6 mg)	^c
BAT (3 mg) vs. BAT (9 mg)	^d
BAT (3 mg) vs. taurine (9 mg)	^d
BAT (6 mg) vs. BAT (9 mg)	^a
BAT (6 mg) vs. taurine (9 mg)	^a
BAT (9 mg) vs. taurine (9 mg)	ns

Data are presented as the means \pm SEM. One-way ANOVA followed by Tukey's multiple comparison test revealed the statistically significant differences between the LPS-stimulated group with the LPS/BAT-treated group and LPS/taurine-treated group. Statistical analysis revealed the comparison of the LPS plus BAT and LPS/taurine-treated group with the LPS-treated group; ns, not significant, ^aP<0.05, ^bP<0.01, ^cP<0.001, ^dP<0.0001. LPS, lipopolysaccharide; BAT, bromamine T.
