

Cyanobacteria *Scytonema javanicum* and *Scytonema ocellatum* lipopolysaccharides elicit release of superoxide anion, matrix-metalloproteinase-9, cytokines and chemokines by rat microglia *in vitro*

Lucas C. Klemm ¹, Evan Czerwonka ², Mary L. Hall ², Philip G. Williams ³, *Alejandro M.S. Mayer ^{2,*}

Table 1. The effect of *E. coli*, *S. javanicum*, and *S. ocellatum* LPS on neonatal rat microglia TXB₂ release.

TXB ₂ Release						
LPS	<i>E. coli</i>		<i>S. javanicum</i>		<i>S. ocellatum</i>	
[ng/mL]	[pg/mL]	n ^a	[pg/mL]	n ^a	[pg/mL]	n ^a
0	6,748.2±613.3	3	6,748.2±613.3	3	6,748.2±613.3	3
0.1	4,683.0±984.4	3	4,649.3±2,641.3	2	4,593.8±2,188.1	2
1	6,488.8±1,278.4	3	5,947.4±384.7	3	6,812.9±645.4	3
10	6,795.3±1,266.6	3	6,120.7±1,218.9	3	6,553.9±756.6	3
100	7,698.5±1,779.9	3	6,207.3±687.9	3	6,545.1±712.2	3
1,000	ND		6,435.5±395.8	3	7,345.9±827.9	3
10,000	ND		6,806.5±1,320.0	3	6,959.0±1,282.0	3
100,000	ND		8,547.1±1,073.6	3	7,328.5±547.5	3

^aNeonatal rat microglia (1.8-2.0×10⁵ cells/well) were treated with *E. coli* LPS [0.1-100 ng/mL], *S. javanicum* LPS [0.1-1×10⁵ ng/mL], or *S. ocellatum* LPS [0.1-1×10⁵ ng/mL] for 18 hours *in vitro*. TXB₂ was determined as described in Materials and Methods. Data expressed as pg/mL is the mean ± SEM from 2 or 3 independent experiments (n), each with triplicate determinations. ND: Not done.