



## Supplementary materials

**Table S1. Production of TNF- $\alpha$  by THP-1 wildtype (WT) and IRAK3 knockout monocytes**

Treatment		TNF- $\alpha$ concentration (pg/mL)				
		Minimum	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile	Maximum
1	PBS (WT)	0.67	6.71	10.48	13.84	18.94
2	Purified FNU1 (WT)	0.00	0.23	2.34	7.00	12.49
3	LPS (WT)	34.21	44.58	64.92	123.51	193.80
4	Crude FNU1 (WT)	29.08	36.47	55.51	75.58	107.43
5	PBS (IRAK3 Knockout)	0.00	0.17	0.89	2.28	5.35
6	Purified FNU1 (IRAK3 Knockout)	0.00	0.13	1.06	3.75	9.13
7	LPS (IRAK3 Knockout)	40.47	66.15	100.95	142.48	157.89
8	Crude FNU1 (IRAK3 Knockout)	147.91	161.79	172.13	246.16	267.90

**Table S2. Production of IL-6 by wildtype (WT) and IRAK3 knockout THP-1 monocytes**

Treatment		IL-6 concentration (pg/mL)				
		Minimum	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile	Maximum
1	PBS (WT)	0.00	5.13	8.54	12.70	22.76
2	Purified FNU1 (WT)	0.00	2.80	6.10	20.89	47.47
3	LPS (WT)	11.55	32.03	48.12	77.52	111.36
4	Crude FNU1 (WT)	15.21	32.57	48.69	137.03	246.05
5	PBS (IRAK3 Knockout)	0.00	4.48	8.01	26.62	51.11
6	Purified FNU1 (IRAK3 Knockout)	0.00	1.58	3.49	37.83	65.90
7	LPS (IRAK3 Knockout)	44.35	55.54	133.35	139.49	179.78
8	Crude FNU1 (IRAK3 Knockout)	143.05	168.34	178.51	185.42	210.77

**Table S3. Production of IL-10 by wildtype (WT) and IRAK3 knockout THP-1 monocytes**

Monocyte type	Treatment	IL-10 concentration (pg/mL)				
		Minimum	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile	Maximum
Wildtype	PBS	0	0.14	0.68	1.725	3.28
	Purified FNU1	0	0.43	1.295	3.9975	6.35
	LPS	1.05	4.525	6.64	8.105	11.34
	Crude FNU1	0.96	8.02	13.8	15.38	24.39
IRAK3 knockout	PBS	0	1.38	2.49	8.29	16.52
	Purified FNU1	0	2.2625	5.37	6.475	12.31
	LPS	0.11	1.5175	3.945	6.66	8.94
	Crude FNU1	1.15	3.44	5.83	9.55	17.25

**Table S4. Levels of endotoxins present in purified and crude bacteriophage FNU1 quantified using an endotoxin detection kit**

Bacteriophage preparation	Levels of endotoxin (EU/mL)				
	Minimum	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile	Maximum
Crude FNU1	13988.85	31728.33	61632.03	65560.06	85453.62
Purified FNU1	1.55	1.90	2.02	2.17	2.24

**Table S5. Estimated levels of endotoxin present in THP-1 knockout out samples after crude and purified FNU1 treatment using the new endotoxin assay**

Cytokine	Bacteriophage Preparation	Levels of endotoxin (EU/mL)				
		Minimum	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile	Maximum
IL-6	Crude FNU1	52970.57	61151.40	106543.61	197374.35	347747.78
	Purified FNU1	0.13	0.97	4.19	22.07	37.71
TNF- $\alpha$	Crude FNU1	78376.38	115839.37	179524.57	234155.79	244456.83
	Purified FNU1	2.40	3.00	5.36	8.59	15.18

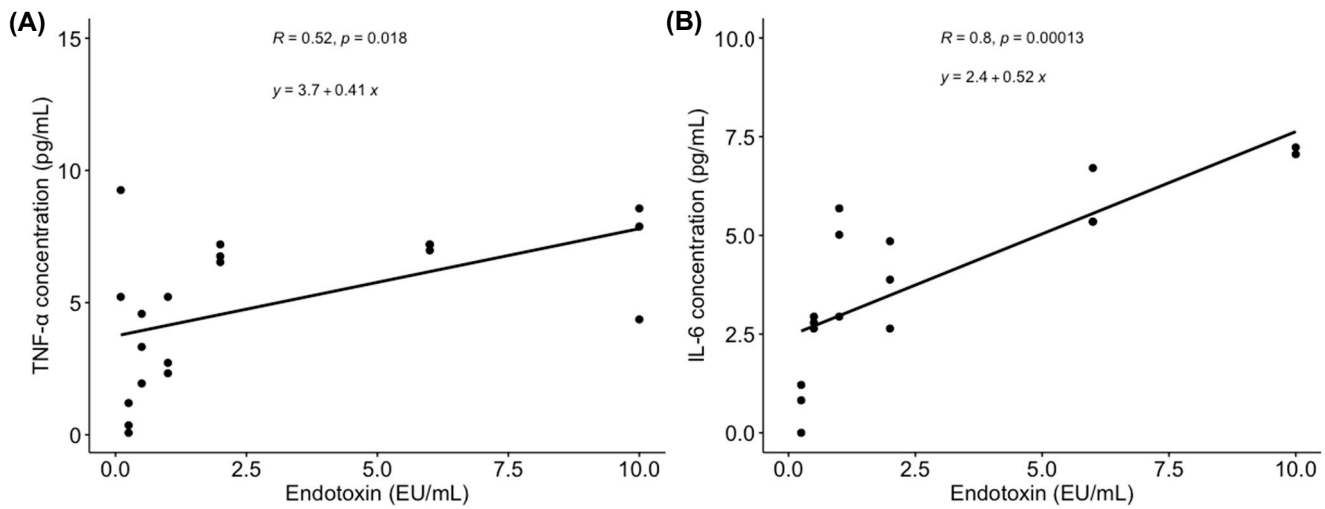


Figure S1. Standard curve of cytokine production by THP-1 wildtype monocytes against endotoxin levels; (A) TNF- $\alpha$  indicate an  $R = 0.52$  and 27% chance of predicting endotoxin levels from an  $R^2$  of 0.27, while (B) IL-6 indicate an  $R = 0.8$  and 64% chance of predicting endotoxin levels from  $R^2 = 0.64$ .

Known endotoxin concentrations (10, 6, 2, 1, 0.5, 0.25, 0.1, 0 EU/mL) were incubated with THP-1 monocytes over 24 hours. Cell supernatant was collected and analysed for cytokine production by ELISA.