

Supplementary Materials: Effect of *Vipera ammodytes ammodytes* Snake Venom on the Human Cytokine Network

Francisc Boda, Krisztina Banfai, Kitti Garai, Augustin Curticepean, Lavinia Berta, Emese Sipos and Krisztian Kvell

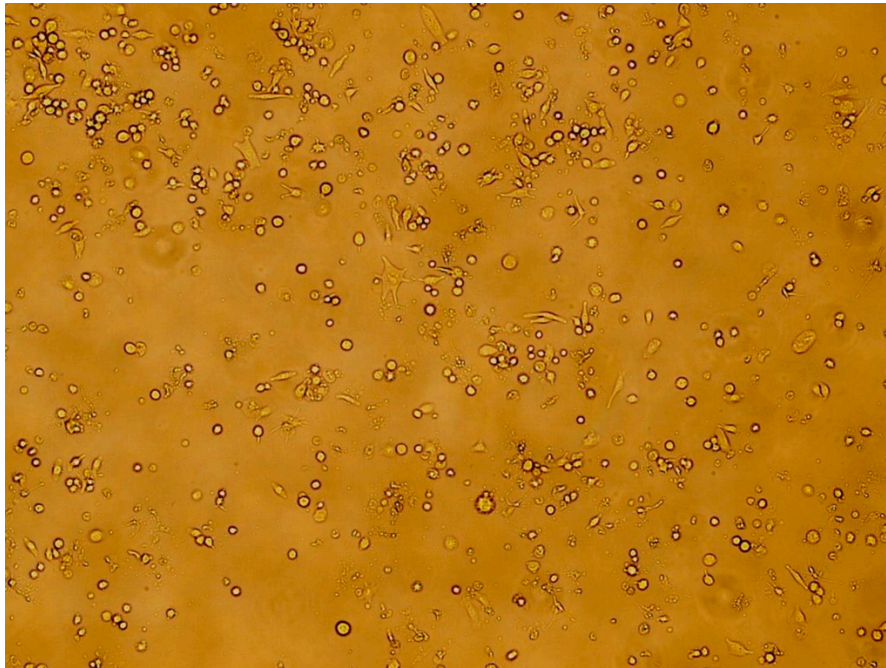


Figure S1. Monocyte cells treated with 1.0 µg/mL *VaaV* solution showing differentiation towards macrophage lineage as suggested by adherent polygonal cellular shape and growth arrest.

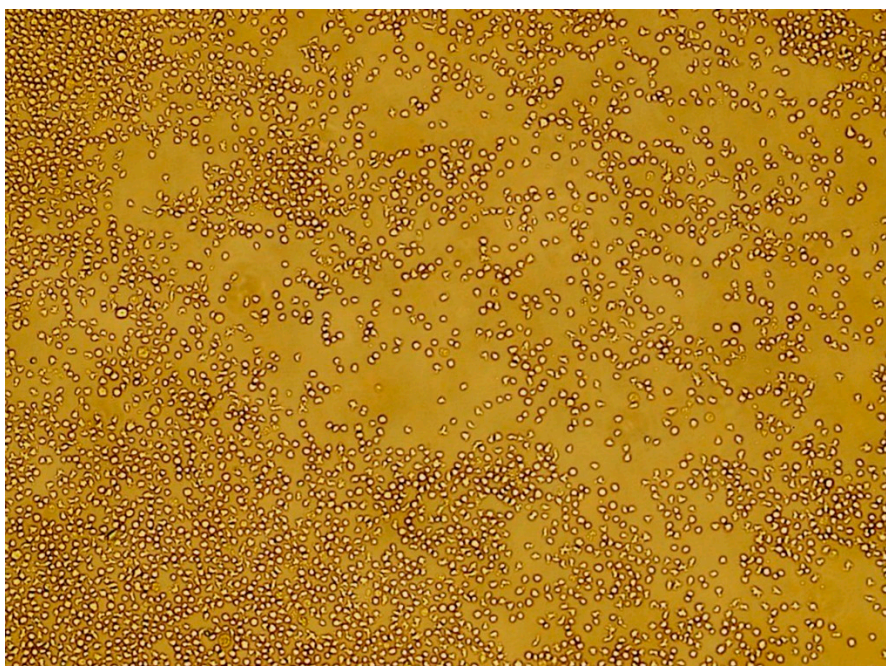


Figure S2. Viable monocytes, lacking signs of differentiation following incubation without treatment, serving as negative control.

Table S1. Relative quantification (RQ) values measured following treatment of U937 cells with 1.0 µg/mL *VaaV*. All assays were plated in triplicate. Untreated cells served as reference (negative control). Mean RQ, standard error, and 90% confidence interval (using t-distribution for small set of samples) were calculated if at least two values were measured.

| Target name | Sample (1 µg/mL <i>VaaV</i>) | | | |
|---------------------------|----------------------------------|---------|-------|----------------|
| | Measured RQ (n=3) | Mean RQ | SE | CI (90%) |
| <i>18S</i> ¹ | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>GAPDH</i> ¹ | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>HPRT1</i> ¹ | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>GUSB</i> ¹ | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IFNA1</i> | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IFNA16</i> | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IFNA17</i> | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IFNA2</i> | 2.525 | | | |
| | ND | 6.572 | 4.048 | 6.572 ± 25,556 |
| | 10.620 | | | |
| <i>IFNA6</i> | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IFNA7</i> | 5.964 | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IFNA8</i> | 1.914 | | | |
| | ND | NI | NI | NI |
| | 0.665 | | | |
| <i>IFNB1</i> | 2.788 | | | |
| | 3.654 | 2.700 | 0.578 | 2.700 ± 1,686 |
| | 1.658 | | | |
| <i>IFNG</i> | ND | | | |
| | ND | NI | NI | NI |
| | ND | | | |
| <i>IL10</i> | 5.841 | | | |
| | 4.700 | 5.321 | 0.333 | 5.321 ± 0,972 |

| | | | | |
|--------------|-------|-------|-------|---------------|
| | 5.422 | | | |
| | 0.454 | | | |
| <i>IL12A</i> | 0.572 | 0.513 | 0.059 | 0.513 ± 0,374 |
| | ND | | | |
| | 0.886 | | | |
| <i>IL12B</i> | 0.001 | 0.444 | 0.443 | 0.444 ± 2,794 |
| | ND | | | |
| | ND | | | |
| <i>IL13</i> | ND | NI | NI | NI |
| | ND | | | |
| | ND | | | |
| <i>IL15</i> | ND | NI | NI | NI |
| | ND | | | |
| | 1.435 | | | |
| <i>IL16</i> | 1.490 | 1.436 | 0.031 | 1.436 ± 0.089 |
| | 1.384 | | | |
| | ND | | | |
| <i>IL17A</i> | ND | NI | NI | NI |
| | ND | | | |
| | 0.569 | | | |
| <i>IL18</i> | 0.575 | 0.561 | 0.011 | 0.561 ± 0,033 |
| | 0.538 | | | |
| | 6.062 | | | |
| <i>IL1A</i> | 5.094 | 4.672 | 1.642 | 4.672 ± 2,767 |
| | 2.861 | | | |
| | 7.134 | | | |
| <i>IL1B</i> | 6.859 | 7.213 | 0.231 | 7.213 ± 0,673 |
| | 7.646 | | | |
| | ND | | | |
| <i>IL2</i> | ND | NI | NI | NI |
| | ND | | | |
| | ND | | | |
| <i>IL3</i> | ND | NI | NI | NI |
| | ND | | | |
| | ND | | | |
| <i>IL4</i> | ND | NI | NI | NI |
| | ND | | | |
| | 9.880 | | | |
| <i>IL5</i> | ND | NI | NI | NI |
| | ND | | | |
| | 1.411 | | | |
| <i>IL6</i> | 0.457 | NI | NI | NI |
| | ND | | | |
| | 7.540 | | | |
| <i>IL8</i> | 6.493 | 6.969 | 0.306 | 6.969 ± 0,893 |
| | 6.875 | | | |
| <i>IL9</i> | ND | NI | NI | NI |

| | | | | |
|------------|-------|-------|-------|---------------|
| | ND | | | |
| | ND | | | |
| | 2.919 | | | |
| <i>LTA</i> | ND | NI | NI | NI |
| | ND | | | |
| | 1.596 | | | |
| <i>TNF</i> | 1.512 | 1.589 | 0.043 | 1.589 ± 0,124 |
| | 1.659 | | | |

¹ Endogenous control genes. ND: Not detectable. NI: Not interpretable. SE: Standard error; CI: Confidence interval; *GAPDH*: glyceraldehyde-3-Phosphate Dehydrogenase ; *HPRT1*: hypoxanthine phosphoribosyltransferase 1; *GUSB*: glucuronidase beta; *IFNA*: interferon alpha; *IFNB*: interferon beta; *IFNG*: interferon gamma; *IL*: interleukin; *LTA*: lymphotoxin alpha; *TNF*: tumor necrosis factor.