Supporting Information for

**Hepatitis C Virus Core Protein Increases Expression of DR4 and DR5 in Peripheral Blood Mononuclear Cells**

Janelle Guy \(^2\)*, Lechi Nwanegwo \(^1\), Emmanuella Sobo \(^1\), Kadir Aslan \(^2\)*

\(^1\) Department of Biology, Morgan State University, USA.
\(^2\) Department of Civil Engineering, Morgan State University, 1700 East Cold Spring Lane, Baltimore, MD 21251 USA.

* Corresponding authors. E-mail: jaguy9@morgan.edu; kadir.aslan@morgan.edu

**Supporting Information 1** Semi-quantitative analysis of soluble TRAIL-R1 and TRAIL-R2 using an indirect ELISA method. PBMCs were stimulated for (A) three hours, (B) six hours, or (C) twelve hours with LPS from *Salmonella enterica* serotype Minnesota or recombinant HCV core protein. Unstimulated PBMCs were used as control PBMCs. Baseline or t = 0 was used for a time control. Bar graphs represent the average absorbance of OPD product at 490 nm. Error bars show the standard deviation. Abbreviations: TRAIL-R1, tumor necrosis factor apoptosis inducing ligand-receptor 1; TRAIL-R2, tumor necrosis factor apoptosis inducing ligand-receptor 2; U.PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.

[Graphs showing absorbance levels at different incubation times.]

**Supporting Information 2** Stacked proportion graphs indicating the relative percent change in soluble TRAIL-R1 and TRAIL-R2 protein levels in various incubation periods (A) three hours, (B) six hours, and (C) twelve hours. Unstimulated PBMCs were set as the reference group = 1. Abbreviations: TRAIL-R1, tumor necrosis factor apoptosis inducing ligand-receptor 1; TRAIL-R2, tumor necrosis factor apoptosis inducing ligand-receptor 2; U. PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.

[Graphs showing relative percent change over time.]

Supporting Information 3 Semi-quantitative analysis of membrane-bound TRAIL-R1 and TRAIL-R2 using an indirect ELISA method. PBMCs were stimulated for (A) three hours, (B) six hours, or (C) twelve hours with LPS from *Salmonella enterica* serotype Minnesota or recombinant HCV core protein. Unstimulated PBMCs were used as control PBMCs. Baseline or t = 0 was used for a time control. Bar graphs represent the average absorbance of OPD product at 492 nm. Error bars show the standard deviation. Abbreviations: TRAIL-R1, tumor necrosis factor apoptosis inducing ligand-receptor 1; TRAIL-R2, tumor necrosis factor apoptosis inducing ligand-receptor 2; U. PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.

Supporting Information 4 Stacked proportion graphs indicating the relative percent change in membrane-bound TRAIL-R1 and TRAIL-R2 protein levels in various incubation periods (A) three hours, (B) six hours, and (C) twelve hours. Unstimulated PBMCs were set as the reference group = 1. Abbreviations: TRAIL-R1, tumor necrosis factor apoptosis inducing ligand-receptor 1; TRAIL-R2, tumor necrosis factor apoptosis inducing ligand-receptor 2; U. PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.
Supporting Information 5 Soluble TRAIL expression in PBMCs. (A) Semi-quantitative analysis of soluble TRAIL using an indirect ELISA method. Bar graphs represent the average absorbance of OPD product formation at 490 nm. Error bars show the standard deviation (SD). (B) Stacked proportion graphs indicating the relative percent change in soluble TRAIL in three hours, six hours, and twelve hours relative to U. PBMCs. U. PBMCs are set as the reference group = 1. Abbreviations: U. PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.

Supporting Information 6 Membrane-bound TRAIL expression in PBMCs. (A) Semi-quantitative analysis of membrane-bound TRAIL using an indirect ELISA method. Bar graphs represent the average absorbance of OPD product formation at 492 nm. Error bars show the standard deviation (SD). (B) Stacked proportion graphs indicating the relative percent change in membrane-bound TRAIL after three, six, and twelve hours of incubation relative to U.PBMCs. U.PBMCs are set as the reference group = 1.
Supporting Information 7 Representative zebra plots of multicolor FACS analysis of TRAIL-R1, TRAIL-R2, and TRAIL in peripheral blood mononuclear cells after six hours of incubation from one replicate. Baseline was the time control (t = 0). The numbers in each box represent the percentage of positive cells. Abbreviations: TRAIL-R1, tumor necrosis factor apoptosis inducing ligand-receptor 1; TRAIL-R2, tumor necrosis factor apoptosis inducing ligand-receptor 2; TRAIL, tumor necrosis factor apoptosis inducing ligand; U. PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.
Supporting Information 8 Representative zebra plots of multicolor FACS analysis of TRAIL-R1, TRAIL-R2, and TRAIL in peripheral blood mononuclear cells after twelve hours of incubation from one replicate. Baseline was the time control ($t = 0$). The numbers in each box represent the percentage of positive cells. Abbreviations: TRAIL-R1, tumor necrosis factor apoptosis inducing ligand-receptor 1; TRAIL-R2, tumor necrosis factor apoptosis inducing ligand-receptor 2; TRAIL, tumor necrosis factor apoptosis inducing ligand; U. PBMCs, unstimulated peripheral blood mononuclear cells; LPS, lipopolysaccharide; rHCV, recombinant HCV core protein.