

Figure S1. Cytotoxicity assessment of the mixture of Oregano components with or without Carvacrol and activity of the thyme oil red. (A) Cytotoxicity of the mixture of compounds present in the Oregano in HeLa-CD4-LTR-LacZ cells. Show is mean±SEM of n=2. (B, C) Activity of the thyme oil red against HIV infection. (B) CPRG assays and (C) viability assays of the thyme oil incubated with HeLa-CD4-LTR-LacZ cells infected with NL4-3 for 72 hours. Data is the mean±SEM of n=2.

Human primary CD4⁺ T cells

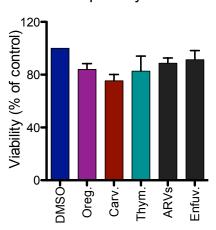


Figure S2. Cytotoxicity assessment of the Oregano and related compounds in human primary CD4 $^+$ T cells. Antiretrovirals: ARVs: Raltegravir 200nM, Lamivudine 200nM and Efavirenz 100nM. Enfuvirtide (Enfuv., 1 μ g/mL), Oregano (1:40000 dilution), Carvacrol and Thymol (100 μ M). Shown is mean±SEM of n=3.

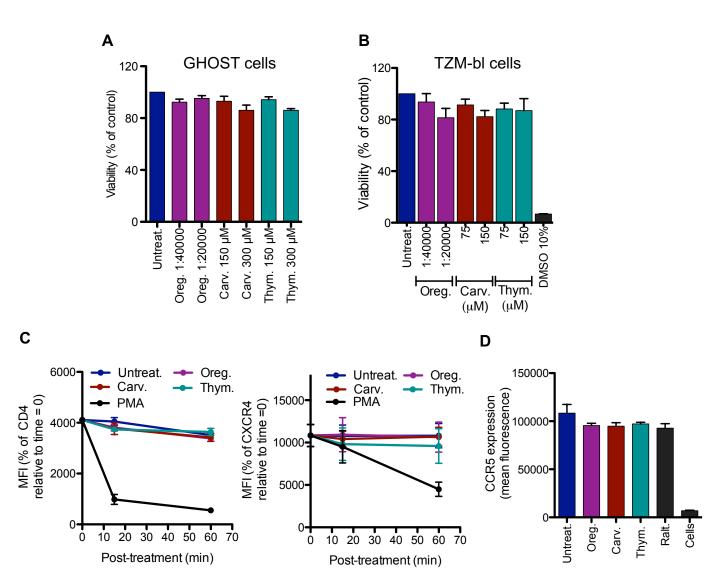


Figure S3. Anti-HIV activity of the Oregano and related compounds on R5 tropic HIV-1. (A, B) Cytotoxicity of Oregano and related compounds in (A) GHOST and (B) TZM-bl cells. Data is mean±SEM of n=3 and n=4 respectively. (C) Expression of CD4 and CXCR4 receptors on HeLa-CD4-LTR-LacZ cells in presence of the oil or compounds at 1:40000 dilution or $100\mu M$ respectively. The phorbol ester phorbol myristate acetate (PMA, 100nM) used as control. Shown is mean±SEM of n=2. (D) Expression of CCR5 receptor on GHOST cells after 6 hours incubation with oil or compounds at 1:40000 dilution or $100\mu M$ respectively. Raltegravir (100nM). Shown is mean±SEM of n=3.

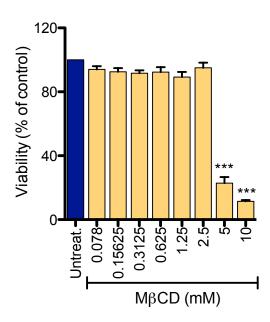


Figure 4. Cytotoxicity assessment of the Methyl-ß-cyclodextrin (MßCD), a cholesterol depleting compound, in TZM-bl cells. TZM-bl cells were incubated with MßCD and luminescence determined 72 hours later. Data is the mean \pm SEM of n=3. One-way ANOVA followed by Turkey post-test were used for statistical analysis.*** p < 0.0001.

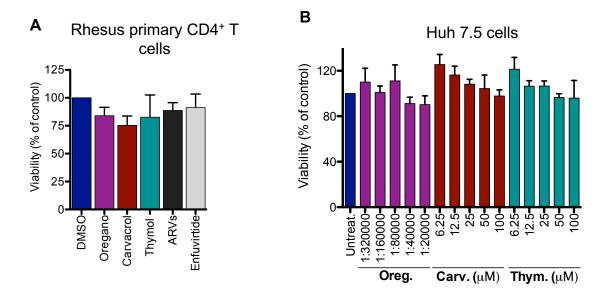


Figure S5. Cytotoxicity assessment of the Oregano and its related compounds on different cell types. Cytotoxicity of Oregano and related compounds in: (A) Rhesus primary CD4 $^+$ T cells. Antiretrovirals: ARVs (Raltegravir, Emtracitabine, Tenofovir, 200nM). Oregano (1:40000 dilution), Carvacrol and Thymol (100 μ M), Enfuvirtide (1 μ g/ml). Shown is mean \pm SEM of n=2. (B) Huh 7.5 cells. Data is mean \pm SEM of n=3.