

Supplemental Materials and Methods

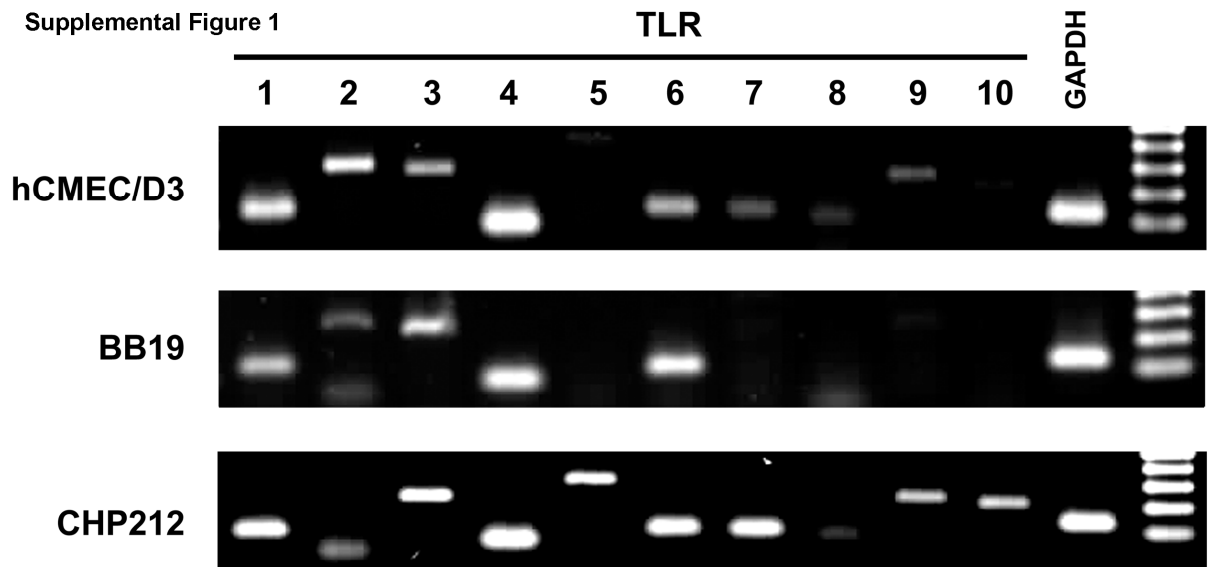
1. HBMEC culture

Primary human brain microvascular endothelial cells (HBMEC) obtained from Dr. Honghong Yao (University of Nebraska, Omaha, NE) were cultured in RPMI 1640 medium containing 10% heat-inactivated fetal bovine serum, 10% Nu-Serum, 2 mM glutamine, 1 mM pyruvate, penicillin (100 U/ml), streptomycin (100 µg/ml), 1% nonessential amino acids, and 1% vitamins.⁵² HBMECs were treated with treated with LyoVec or PolyI:C for 16 h. The medium was removed and cells were washed three times with PBS. After additon of fresh medium, cells were cultured to 48 h post-treatment and then the culture supernatants were collected and cells were lysed for RNA extraction in Tri-reagent.

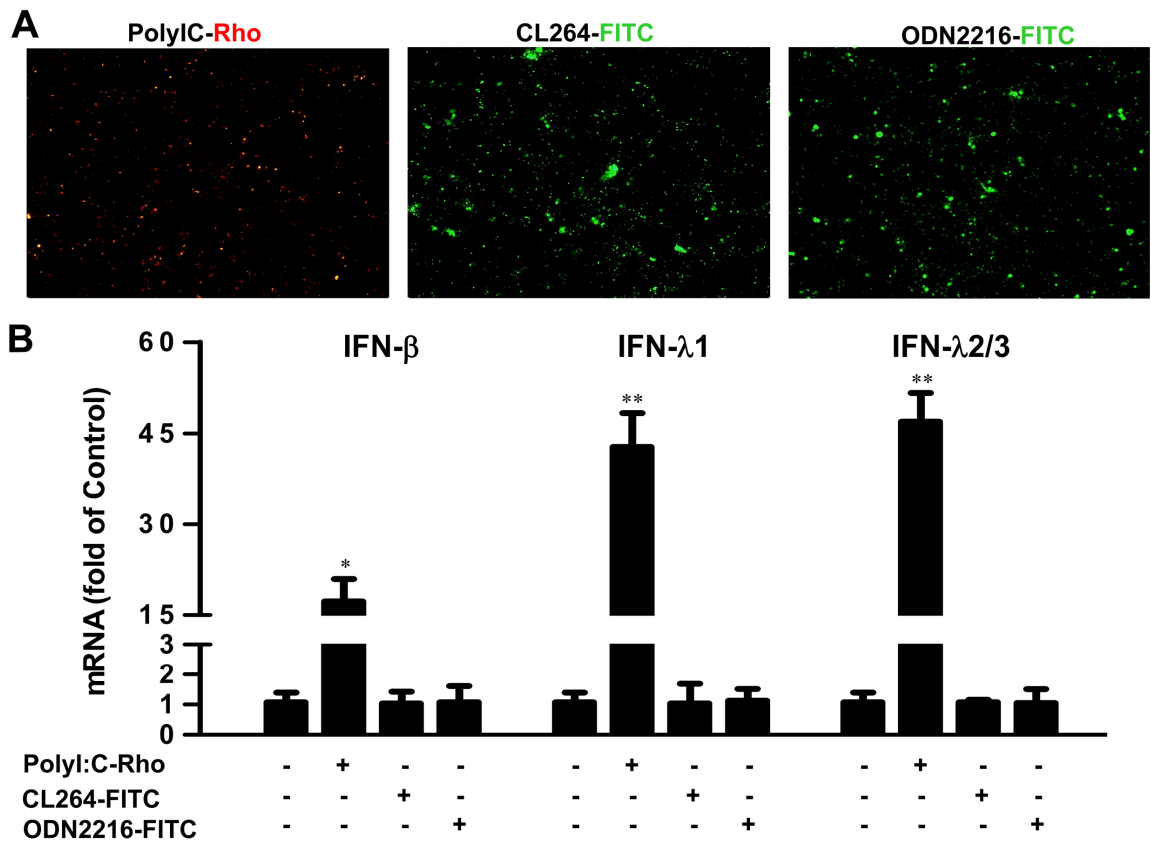
2. HMVEC-L culture

Human Lymphatic Microvascular Endothelial Cells, Lung-Derived (HMVEC-L) were purchased from Lonza. HMVEC-L were cultured in microvascular endothelial cell growth medium-2 (EGM2-MV BulletKit; Lonza) according to the supplier's recommendations. HMVEC-L were plated in multiwell plates for overnight seeding and then treated with LyoVec or PolyI:C for 16 h. The medium was removed and cells were washed three times with PBS. After additon of fresh medium, cells were cultured to 48 h post-treatment and then the culture supernatants were collected and cells were lysed for RNA extraction in Tri-reagent.

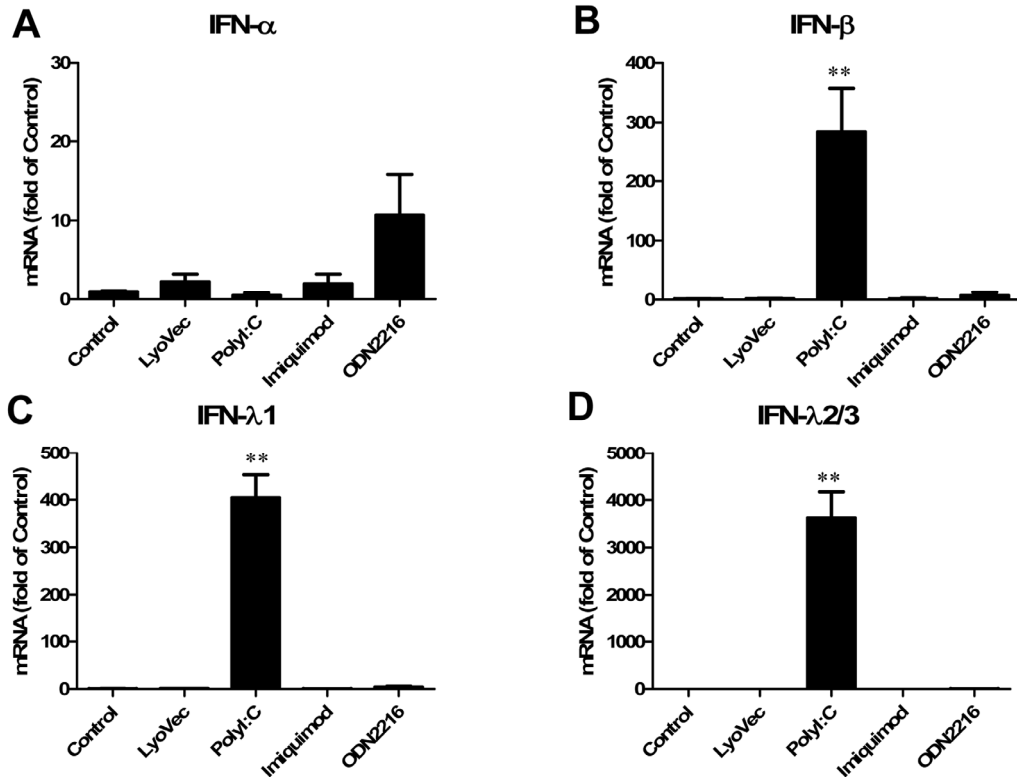
Supplemental Figure 1



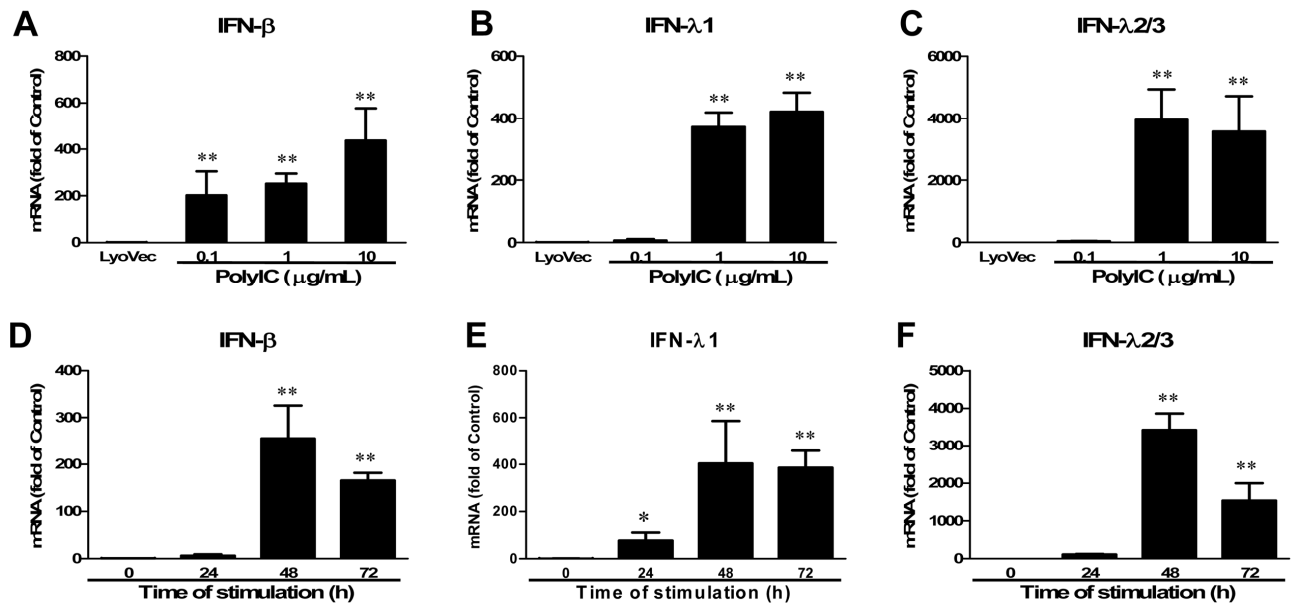
Supplemental Figure 2



Supplemental Figure 3

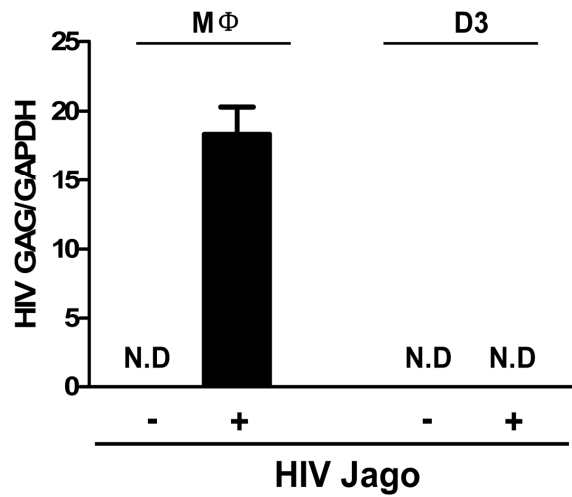


Supplemental Figure 4

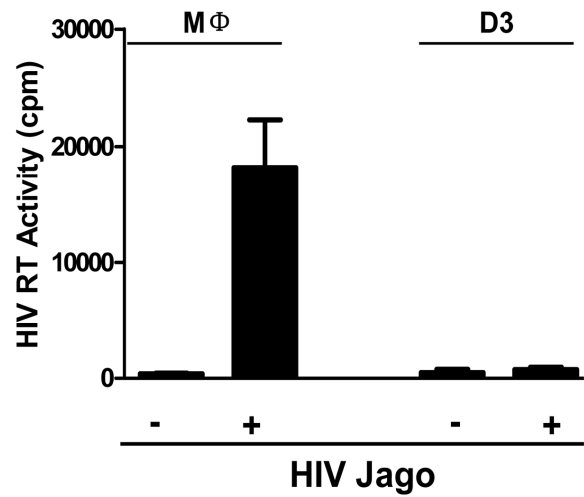


Supplemental Figure 5

A HIV GAG gene Expression
(Intracellular)

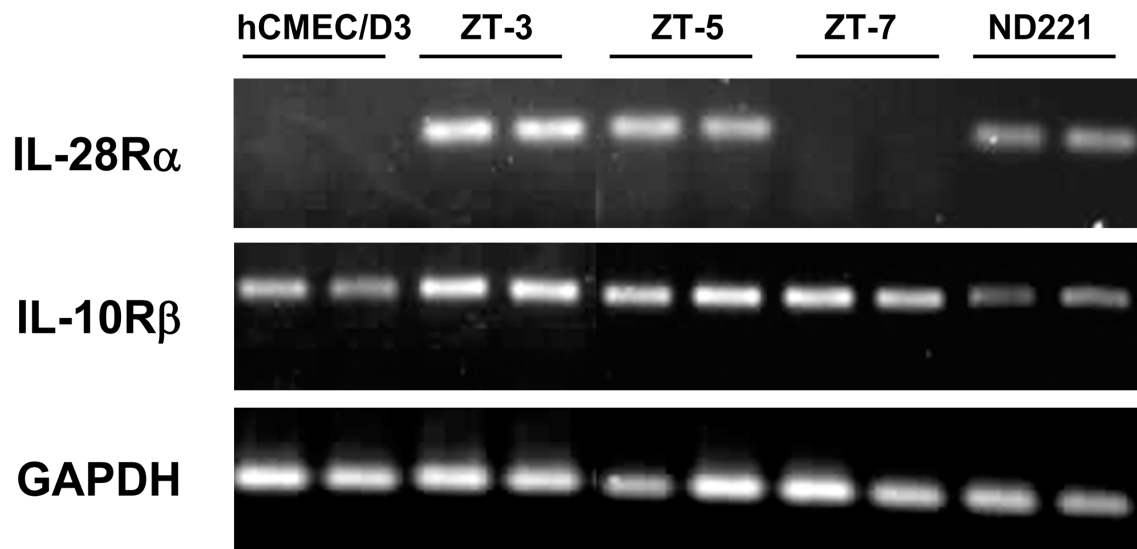


B HIV RT Activity
(Extracellular)



Supplemental Figure 6

Primary macrophages of 4 donors



Supplemental Figure 7

