## Supplemental Tables

Gene	Forward primer (5'-3')	Reverse primer (5'-3')		
Actin	TCCCTGGAGAAGAGCTACGA	AGGAAGGAAGGCTGCAAGAG		
ATP6V1C1	CGGCAACTTCAAAGAACAAT	AAGCCCAACAGGAACCACACTG		
Cathepsin K	GATGACTGGACTCAAAGTACC	AAGCCCAACAGGAACCACACTG		
Gag	AGTGGGGGGACATCAAGCAGCCATGCAAT	TGCTATGTCACTTTCCCCTTGGTTCTCT		
NFATc1	CACCGCATCACAGGGAAGAC	GCACAGTCAATGACGGCTC		
RhoE	GACACTTCGGGTTCTCCT	CAAAGCAAATCAGCACAGC		
τνγα	GAGGCCAAGCCCTGGTATG	CGGGCCGATTGATCTCAGC		
TRAP	TGACTTCCTCAGCCAGCA	AGCCCACGCCATTCTCATCTTG		
β3 integrin	CCTGCTCATCTGGAAACTC	TGGGTTGTTGGCTGTGTC		

## Supplemental table 1 : list of primers used for cDNA amplification

## Supplemental table 2 : list of primary antibodies used and applications

Target protein	Host specie	Clonality	Supplier	Application	Catalog number
Anti-human HRP	Goat	Polyclonal	Sigma	ELISA	A0170
HIV (detection)	Human	Polyclonal	NIH AIDS	ELISA	3957
			Reagent		
			Program		
HIV-p24 (Capture)	Mouse	Monoclonal (IgG1 κ), clone 183-H12-5C	NIH AIDS	ELISA	3537
			Reagent		
			Program		
Anti-mouse AF555	Goat	Polyclonal	Cell	IF	4084
Anti-mouse AF555			Signaling		
1111/	Mouse	Monoclonal (IgG1), clone	Beckman	IF	KC57-RD1
HIV-p24		FH190-1-1	Coulter		
Vinculin	Mouse	Monoclonal (IgG1), clone	Sigma	IF	V9131
		hVIN-1			
Anti-mouse HRP	Goat	Polyclonal	Dako	WB	P0447
Anti-rabbit HRP	Goat	Polyclonal	Dako	WB	P0448
Cathepsin K	Rabbit	Polyclonal	Abcam	WB	ab19027
RhoE	Mouse	Monoclonal (IgG1)	Cell	WB	3664
			Signaling		
Tubulin	Mouse	Monoclonal (IgG1), clone B5-1-2	Sigma	WB	T5168
Signaling					

## Supplemental Figure legends

**Supplemental Figure 1**: (A) Infection of MF with HIV-1 (ADA or NLAD8 strain) was evaluated by measuring the expression of the viral gene Gag by RT-qPCR (left panel, results are normalized to GAPDH expression), calculating the fusion index by immunofluorescence (middle) and measuring p24 release in the supernatant by ELISA (right). Bars represent median, n = 4 to 9 donors. (B) Representative IF images of MF infected with Transmitted/founder strains SUMA (left) and THRO (right) after staining of HIV-p24 (red), F-actin (green), and nuclei (DAPI, blue). Scale bar, 20  $\mu$ m. (E) Cathepsin K (Ctsk) protein expression level was measured by Western blot in lysates from OC and infected (HIV-MF, ADA or NLAD8 strain) or uninfected MF (NI-MF). Tubulin was used as loading control. A representative blot and quantification of CtsK level relative to autologous NI-MF are shown. Bars represent median, n = 6 donors. \* p ≤ 0.05 ; \*\* p ≤ 0.001 ; \*\*\* p ≤ 0.001, ns: not significantly different.

**Supplemental Figure 2** : Monocytes were seeded on bone slices, differentiated into macrophages for 7 days. Cells were then infected or not with HIV-1 and all cells were fixed at day 14. Representative IF images of cells after staining for HIV-p24 (red), F-actin (green), and nuclei (DAPI, blue). Scale bar, 10  $\mu$ m.

**Supplemental Figure 3**: (A-B) MF were infected or not with HIV-1 (ADA or NLAD8 strain) for 10 days and their expression of pro-inflammatory cytokines was evaluated. (A) Released IL-1 $\beta$  (left) and IL6 (right) was measured in the supernatants by ELISA. Bars represent median, n = 5 to 7 donors. (B) TNF $\alpha$ expression was measured by RT-qPCR (results are normalized to actin). Bars represent median, n = 3 to 6 donors.