

Table S1. Caudal striatum (cSTR) cytokine level summary statistics stratified by rat model WT vs. HIV-1_{Tg}. Student's t-tests with unequal variance were used to compare the difference in mean expression levels (and SD) of each cytokine, chemokine, or growth factor in WT (saline-yoked (*n* = 7) and cocaine SA (*n* = 8)) and HIV-1_{Tg} (saline-yoked (*n* = 6) and cocaine SA (*n* = 6)) in the cSTR. The 95% CI, overall p value and cumulative replicates are given in the table. Bold cytokines, chemokines, or growth factors indicate targets that were significantly increased in HIV-1_{Tg} rats compared to WT.

Cytokine (log ₂ Transformed)	WT					HIV-1 _{Tg}				
	Saline	Cocaine	95% CI	p-value	Adjusted p-value (Bonferroni)	Saline	Cocaine	95% CI	p-value	Adjusted p-value (Bonferroni)
	Mean	Mean				Mean	Mean			
	(SD)	(SD)				(SD)	(SD)			
G-CSF	0.44 (0.81)	0.09 (0.63)	[-0.595, 1.29]	0.428	0.430	0.34 (0.70)	0.46 (0.45)	[-0.811, 0.574]	0.711	0.710
GM-CSF	3.03 (0.64)	2.70 (0.60)	[-0.46, 1.13]	0.369	0.370	2.44 (0.55)	2.59 (0.35)	[-0.610, 0.392]	0.555	0.560
GRO/KC	-0.49 (0.93)	-1.47 (1.14)	[-0.433, 2.40]	0.151	0.150	-2.56 (2.42)	-0.91 (0.68)	[-3.90, 0.602]	0.126	0.130
IFN- γ	3.60 (0.79)	3.23 (0.62)	[-0.543, 1.29]	0.383	0.380	3.71 (0.79)	3.91 (0.38)	[-0.948, 0.544]	0.551	0.550
IL-1 α	-0.29 (1.35)	-0.38 (0.56)	[-1.34, 1.51]	0.894	0.890	-1.09 (1.17)	-0.79 (1.38)	[-1.79, 1.19]	0.666	0.670
IL-1 β	0.01 (0.50)	-0.29 (0.77)	[-0.554, 1.16]	0.443	0.440	-0.06 (1.06)	0.28 (0.52)	[-1.35, 0.669]	0.463	0.460
IL-2	9.08 (0.41)	8.74 (0.48)	[-0.234, 0.92]	0.213	0.210	8.74 (0.34)	8.77 (0.19)	[-0.356, 0.297]	0.845	0.840
IL-4	-0.20 (0.47)	-0.57 (0.36)	[-0.181, 0.914]	0.165	0.160	-1.51 (2.62)	-0.471 (0.48)	[-4.28, 2.20]	0.428	0.430
IL-5	2.31 (0.89)	2.09 (0.75)	[-0.840, 1.29]	0.646	0.650	2.21 (0.58)	2.66 (0.22)	[-1.00, 0.09]	0.088	0.088
IL-6	2.05 (0.87)	1.13 (2.06)	[-1.27, 3.09]	0.352	0.350	1.67 (0.14)	0.694 (1.06)	[-0.676, 2.62]	0.162	0.160
IL-7	3.80 (0.70)	3.34 (0.64)	[-0.408, 1.33]	0.265	0.270	3.59 (0.65)	3.68 (0.37)	[-0.717, 0.530]	0.742	0.740
IL-10	3.56 (0.99)	3.15 (0.58)	[-0.657, 1.49]	0.396	0.400	4.98 (0.94)	5.25 (0.56)	[-1.18, 0.642]	0.523	0.520
IL-12	1.99 (1.12)	1.48 (1.10)	[-0.916, 1.94]	0.442	0.440	2.58 (0.80)	3.03 (0.52)	[-1.24, 0.338]	0.232	0.230
IL-18	4.06 (0.90)	3.77 (0.64)	[-0.762, 1.34]	0.548	0.550	3.44 (0.77)	3.67 (0.22)	[-0.947, 0.485]	0.469	0.470
M-CSF	-1.65 (0.84)	-1.82 (1.05)	[-1.06, 1.41]	0.756	0.760	-7.65 (3.45)	-5.42 (3.00)	[-7.57, 3.11]	0.347	0.350
MCP-1	4.17 (0.76)	3.73 (0.70)	[-0.491, 1.38]	0.313	0.310	3.44 (1.10)	3.90 (0.50)	[-1.49, 0.578]	0.339	0.340
MIP-3 α	0.52 (0.72)	0.13 (0.77)	[-0.565, 1.36]	0.38	0.380	-0.75 (0.90)	-0.51 (0.57)	[-1.12, 0.636]	0.55	0.550
RANTES	-1.90 (0.65)	-3.27 (1.03)	[-3.37, 6.10]	0.272	0.270	-1.86 (1.09)	-1.47 (0.46)	[-2.04, 1.26]	0.535	0.540
TNF- α	6.76 (0.57)	6.46 (0.59)	[-0.453, 1.05]	0.396	0.400	6.15 (0.48)	6.18 (0.43)	[-0.549, 0.490]	0.904	0.900
VEGF	1.18 (3.94)	2.32 (3.54)	[-13.3, 11.0]	0.763	0.760	2.99 (1.40)	4.30 (0.87)	[-2.83, 0.199]	0.08	0.080

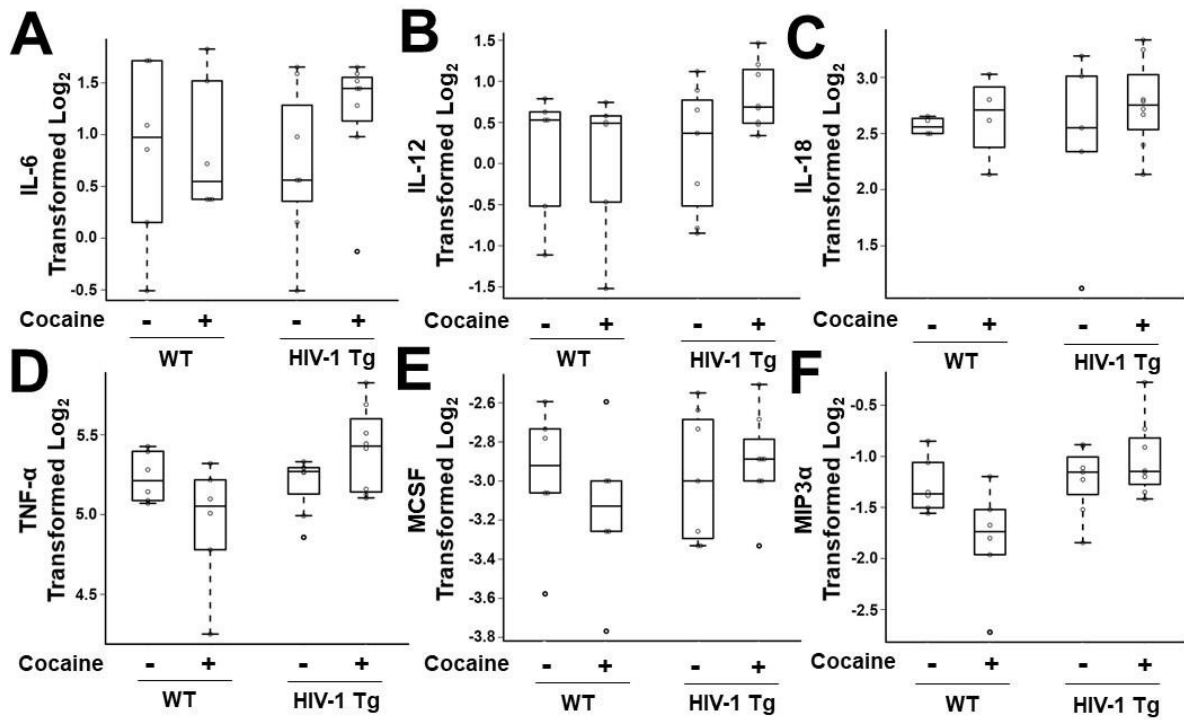


Figure S1. Cytokines with no significant difference in the fCTX of WT and HIV-1Tg rats. FCTX brain tissue was collected, and equivalent total protein lysates were assayed for cytokine levels from F344 saline-yoked ($n=6$), F344 cocaine SA ($n=6$), HIV-1Tg saline-yoked ($n=7$), and HIV-1Tg cocaine SA ($n=8$) male rats. Protein levels for IL-6 (A), IL-12 (B), IL-18 (C), TNF- α (D), MCSF (E), and MIP3 (F) are shown. Log₂ transformation was performed prior to statistical analyses since some expression levels were not normally distributed. All tests were conducted in R (version 3.6.1).