PUERARIA LOBATA (ROOT)			
References	Liu *et al*., 2015	Li *et al*., 2010	Du *et al*., 2010
Origin	Crude extract (China)		
Techniques	Dual high-Resolution alpha glycosidase inhibition and radical scavenging profiling combined with hyphenated HPLC-HRMS-SPE-NMR	HPLC followed by NMR	Microwave-assisted extraction and ultra high performance liquid chromatography coupled with diode array detection and time-of-flight mass spectrometry
Compounds	Puerarin	-	Puerarin
	3′-hydroxypuerarin	-	3′-hydroxypuerarin
	3′-methoxypuerarin	-	3′-methoxypuerarin
	-	-	Puerarin-4′-O-glucoside
	-	-	Puerarin-3′methyoxy-4′-O-glucoside
	-	-	6′′-O-xylosylpuerarin
	6″-*O*-α-d-apiofuranosylpuerarin	-	-
	Daidzin		
	-	-	Daidzin-4′,7-O-glucoside
	6″-*O*-malonyldaidzin	-	-
	3′-methoxydaidzin	-	-
	Daidzein		
	Daidzein 8-*C*-[β-d xylopyranosyl-(1→6)]-β-d-glucopyranoside	-	-
	daidzein 4′-β-d-glucopyranoside	-	-
	-	3′-methoxy daidzein	-
	-	3′-hydroxy daidzein	-
	-	-	Isodaidzein
	Genistein	-	Genistein
	Genistein 8-*C*-α-d-apiosyl-(1→6)-β-d-glucoside	-	-
	Genistein 8-*C*-β-d-glucoside	-	-
	Genistin		
	6″-*O*-malonylgenistin	-	-
	Ononin		
	6″-*O*-malonylononin	-	-
	-	8-methoxy ononin	-
	Formononetin		
	Sissotrin	Sissotorin	-
	-	-	Biochanin A
	Biochanin A 7-*O*-β-d-glucoside-6″-*O*-malonate	-	-
	-	β-Sitosterol palmitate	-
	-	β-Sitosterol	-
	-	Lupeol	-
	-	Lupeone	-
	-	Puerarol	-
	-	Diisobutyl phthalate	-
	-	Bis (2-ethylhexyl) phthalate	-
	-	Sophoracoumestan A	-
	-	Coumestrol	-
	-	Allantion	-
	-	(-)-puerol B 2-O-glucopyranoside	-
	Puerol B 2-*O*-β-d-glucopyranoside	-	-
	-	(6S, 9R)-roseoside	-
	-	Sucrose	-
	-	-	Pseudobaptigenin
	-	-	6′′-O-Apiosyl
	-	-	Sophoraside A
	-	-	Mirificin

Table 1S. Published Components of Kudzu from China.

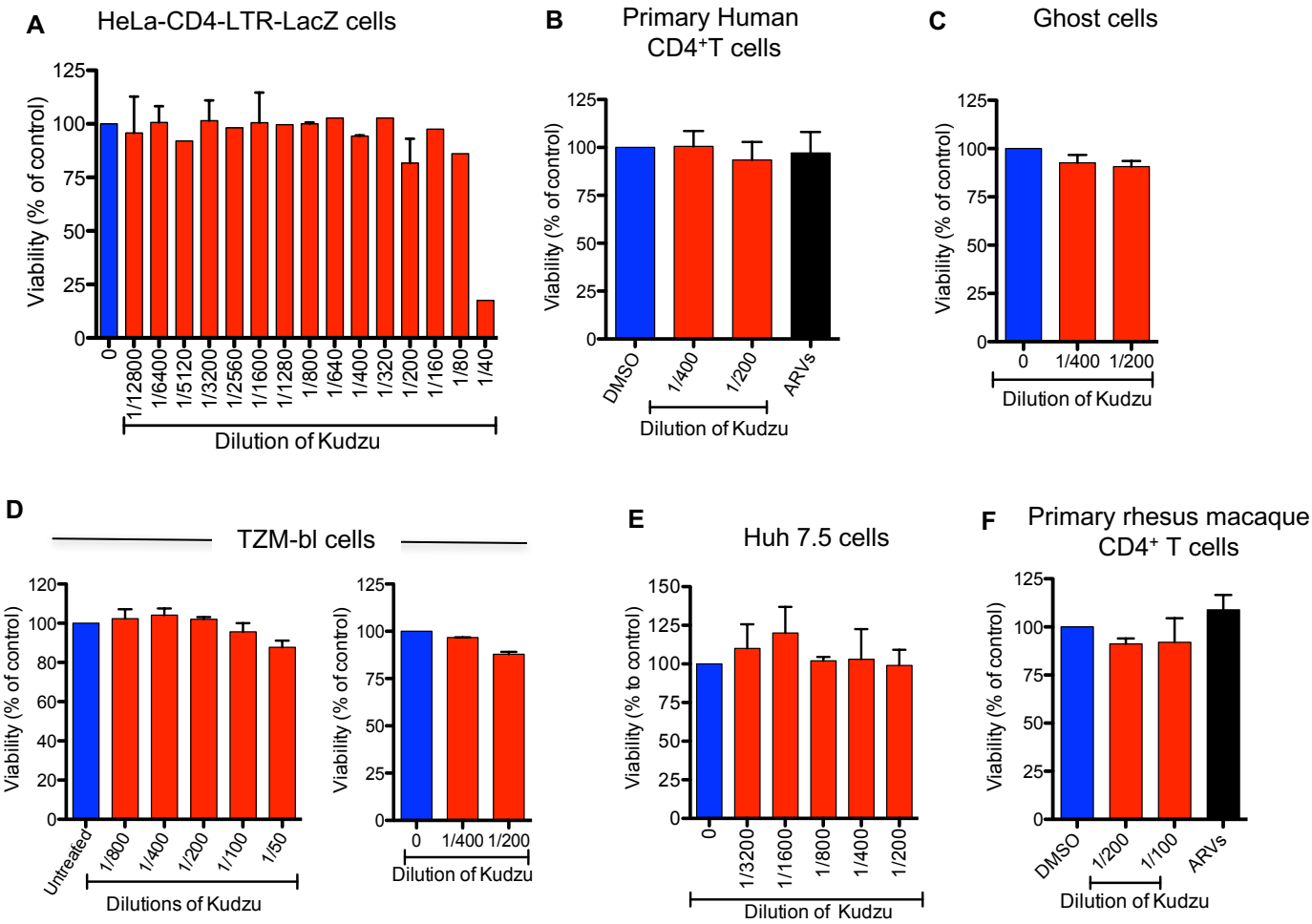

Figure 1S. Cytotoxicity of the cells used. Viability assays performed in (**A**) HeLa-CD4-LTR-LacZ cells 72 h post-treatment in presence of different concentrations of Kudzu. (**B**) HIV-infected primary human CD4+T cells cells 24 h post infection. (**C**) Ghost cells 72 h treatment with Kudzu. ARVs: antiretrovirals (Raltegravir 200 nM, Efavirenz 100 nM, AZT 180 nM), (**D**) TZM-bl cells 3 (on the left) or 72 h (on the right) post-treatment. (**E**) Huh 7.5 cells 72 h post-treatment. (**F**) SIV-infected primary rhesus macaque CD4+T cells 6 days post infection. Results represent average from infection of primary macaque CD4+T cells from three independent rhesus macaques. ARVs: antiretrovirals (Emtracitabine, Raltegravir, Tenofovir, 200 nM). Results represent the mean ± SD of 3 independent experiments for **A**, **B** and **F**, and 2 independent experiments for **C**, **D** and **E.**

A

		Compound	IC_{50}
		Kudzu (dilution)	1:5263 ± $6.3x10^{-5}$
CLASS OF ARVs	Entry inhibitors	Enfuvirtide (nM)	2.3 ± 0.3
		AMD3100 (nM)	0.7 ± 0.1
	Integrase inhibitor	Raltegravir (nM)	4.5 ± 0.6
	Reverse transcriptase inhibitors	Lamivudine (nM)	125.6 ± 2.3
		Efavirenz (nM)	0.5 ± 0.1
		Emtracitabine (nM)	12.0 ± 3.9
		AZT (nM)	4.0 ± 0.7

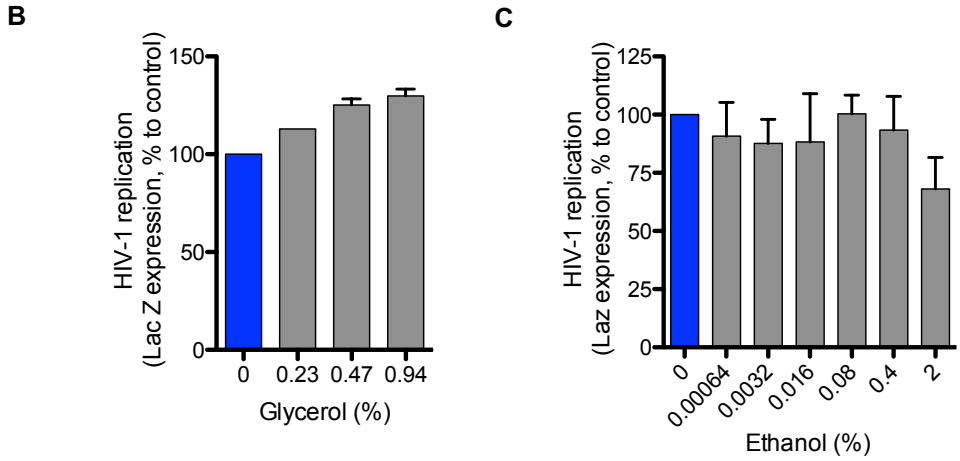

Figure 2S. Activity of Kudzu's vehicles (glycerol and Ethanol) and ARVs in acute infection of HeLa-CD4-LTR-LacZ cells with an X4 tropic virus. (**A**) Table comparing the mean of the IC_{50} ± SD of Kudzu activity and of different potent antiretrovirals (ARVs) against acute infection of HeLa-CD4-LTR-LacZ cells with NL4-3 strain. β-Gal activity was measured 72 later. Shown is mean ± SD of 2 to 5 independent experiments. (**B,C**) HeLa-CD4-LTR-LacZ cells were infected with HIV-1 NL4-3 strain in the presence of different dilutions of Glycerol or Ethanol. β-Gal activity was measured 72 h later. The mean ± SD of 2 independent experiments is represented for the vehicle glycerol condition. The mean ± SEM of 3 independent experiments is shown for the vehicle Ethanol.

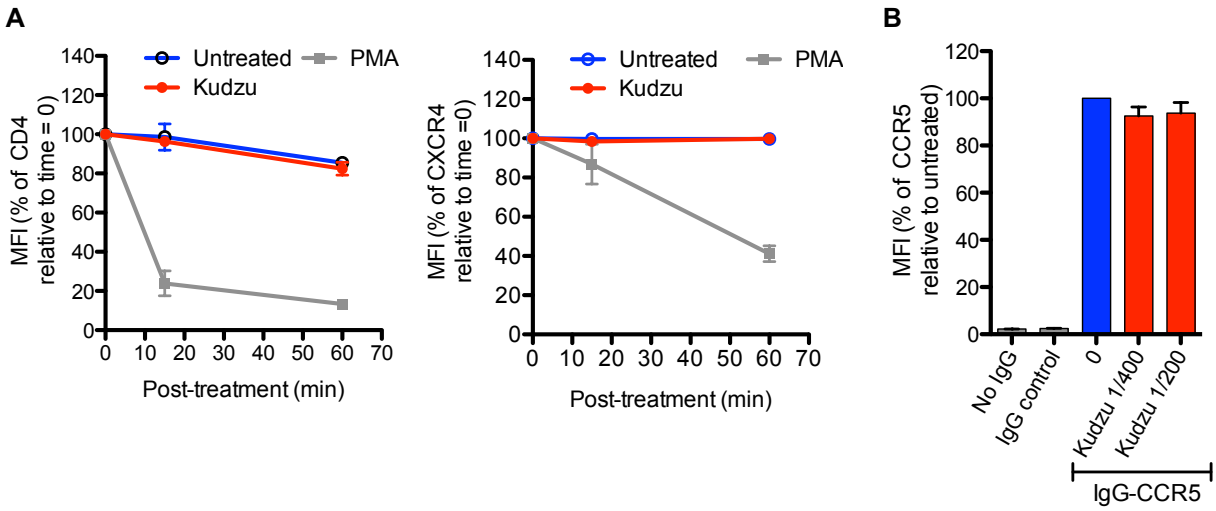

Figure 3S. Kudzu does not alter CD4, CXCR4 and CCR5 cell membrane expression. (**A**) Expression of CD4 and CXCR4 on HeLa-CD4-LTR-LacZ cells in the presence of Kudzu at the dilution 1:400 was detected by FACS. The phorbol ester phorbol myristate acetate (PMA) was used as a control. Results represent the mean ± SD of 2 independent experiments. (**B**) Expression of CCR5 on GHOST-CCR5 cells in the presence of Kudzu at the dilution 1:400 and 1:200 was detected by FACS after 6 h of incubation. Shown is the mean ± SD of 2 independent experiments.

Primer/Probe	Sequence (5'-3')
CD3OUT5	ACTGACATGGAACAGGGGAAG
CD3OUT3	CCAGCTCTGAAGTAGGGAACATAT
CD3IN5	GGCTATCATTCTTCTTCAAGGT
CD3IN3	CCTCTCTTCAGCCATTTAAGTA
CD3 Taq	LC640AGCAGAGAACAGTTAAGAGCCTCCAT-BBQ
HIV L1	ATGCCACGTAAGCGAAACTCTGGGTCTCTCTDGTTAGAC
HIV R1	CCATCTCTCTCCTTCTAGC
HIV L2	ATGCCACGTAAGCGAAACT
HIV R2	CTGAGGGATCTCTAGTTACC
HIV Taq	LC640-CACTCAAGGCAAGCTTTATTGAGGC-BBQ
SGAG21	GTCTGCGTCATPTGGTGCATTC
SGAG22	CACTAGKTGTCTCTGACTATPTGTTTG
SIV TaqMan	CTTCPTCAGTKTGTTTCACTTTCTCTTCTGCG-(BHQ™1)

Table 2S. Table of primers/probes used.