

Supplemental Table 1

Cloning Primers

Backbone	Cloning Primers	
epHIV7	Gib-epHIV7-luc2p 5'	CTACGGCTAGCGTTTAAACGGCCACCATGGAAGATGCC AAAAAC
	Gib-epHIV7-luc2p 3'	CCATGGTGGCCGTTTAAACGGTCTAACAAAAAAGCCAAA AACG
Luc2p epHIV7	Mut-luc2p-MiniTK 5'	ACACCGAGCGACCCTGCAGCGACCCGCTTAAGCTAGCG TTTAAACGGCC
	Mut-luc2p-MiniTK 3'	TCGAGGCCACACGCGTCACCTTAATATGCGAATCGCGAA GCAGCGCAAAA
	Gib-luc2p-CMV 5'	AGGCGTTTTGCGCTGCTTCGCCGCGTTACATAACTTACG
	Gib-luc2p-CMV 3'	CCATGGTGGCCGTTTAAACGGCTTATATAGACCTCCCAC C
	Gib-luc2p-Ub 5'	AGGCGTTTTGCGCTGCTTCGGATCTGGCCTCCGCG
	Gib-luc2p-Ub 3'	CCATGGTGGCCGTTTAAACGGTCTAACAAAAAAGCCAAA AACG
	Gib-luc2p-PGK 5'	AGGCGTTTTGCGCTGCTTCGAATCCCACGGGGTTG
	Gib-luc2p-PGK 3'	CCATGGTGGCCGTTTAAACGCTGGGGAGAGAGGTCTG
	Gib-luc2p-pSYK 5'	AGGCGTTTTGCGCTGCTTCGCGATCCTTCCAGCTTCTAC
	Gib-luc2p-pSYK 3'	CCATGGTGGCCGTTTAAACGCTAGCGCCGGCAGACCTA ACATC
Addgene 26731	Mut-26731 5'	CGGATCTCGAACTAGAGTCGTGCAGGAC
	Mut-26731 3'	GCCCCGCCAGCGTCTTG
eGFP:ffluc-t2a- CD19t epHIV7.2	Gib-GFP-HRE 5'	AGGCGTTTTGCGCTGCTTCGCGACCGAGCTCTGTCAG TCC
	Gib-GFP-HRE 3'	GCCCTTGCTCACCATGGTGGCTAGCTTAAGCGGGTCGC TGCAAG
	Mut-GFP-MiniTK 5'	ACACCGAGCGACCCTGCAGCGACCCGCTTAAGCTAGCC ACCATGGTGAAG
	Mut-GFP-MiniTK 3'	TCGAGGCCACACGCGTCACCTTAATATGCGAATCGCGAA GCAGCGCAAAA
	Gib-IL12-HRE 5'	AGGCGTTTTGCGCTGCTTCGCGACCGAGCTCTGTCAGG

Backbone	Cloning Primers	
CD19t-t2a-hull12 epHIV7.2 eGFP:ffluc-t2a- hull12 epHIV7.2	Gib-IL12-HRE 3'	GGCGAGGAGGTGGCATGGTGGCGCTAGCTTAAGCGGGT CGC
	Mut-IL12-MiniTK 5'	ACACCGAGCGACCCTGCAGCGACCCGCTTAAGCTAGCG CCACCATGCCA
	Mut-IL12-MiniTK 3'	TCGAGGCCACACGCGTACCTTAATATGCGAATCGCGAA GCAGCGCAAAAC
	Gib-GFP:IL12-HRE 5'	AGGCGTTTTGCGCTGCTTCGCGACCGAGCTCTGTACAG TCC
	Gib-GFP:IL12-HRE 3'	CTTGCTCACCATGGTGGCGGCTAGCTTAAGCGGGTCGC TGCAG
	Mut-GFP:IL12- MiniTK 5'	ACACCGAGCGACCCTGCAGCGACCCGCTTAAGCTAGCC GCCACCATGGT
	Mut-GFP:IL12- MiniTK 3'	TCGAGGCCACACGCGTACCTTAATATGCGAATCGCGAA GCAGCGCAAAAC

qPCR Primers

qPCR Primers	
β -Actin 5'	GCCGACAGGATGCAGAAGGAG
β -Actin 3'	AAGCATTGCGGTGGACGATG
Luciferase 5'	CAGTCAGGTGACCACTGCCA
Luciferase 3'	CGCCTTTGCCACCCTTCTTG

Reagents

Antibodies, Western	Company	Catalog	Clone	Dilution or Concentration	Secondary
Goat anti-firefly luciferase	Abcam	AB181640	Poly	1 μ g/mL	Donkey - Goat
Mouse anti- β -actin	CST	3700S	8H10D10	1:1000	Goat - Mouse
Donkey Anti-Goat 800 (II° Ab)	Licor	926-32214	-	1:5000	-
Goat Anti-Mouse 680 (II° Ab)	Licor	925-68070	-	1:5000	-
Antibodies, Flow	Clone	Company	Catalog	Dilution	

LIVE/DEAD Fixable Blue Dead Cell Stain Kit, for UV excitation	N/A	Invitrogen	L34962	1:1000	
Antibodies/Reagents, Live Imaging	Company	Catalog Number	Clone	Dilution	Secondary
Chicken Anti-GFP	Novus	NB100-1614	Poly	1:300	Goat anti-Chicken
Goat anti-Chicken IgY (H+L) Alexa 488	Fisher	A11039	Poly	1:500	-
Anti-human CD326 (EpCAM) Alexa 647	Biolegend	324212	9C4	10 uL in 500 uL (per well)	-
Reagents for Bioplex	Company	Catalog Number			
Bio-Plex Pro Human Cytokine Screening Panel Standards	Bio-Rad	12007919			
Bio-Plex Pro Human Cytokine IL-12 (p70) Set	Bio-Rad	171B5011M			
Bio-Plex Pro Reagent Kit III	Bio-Rad	Various			
nCounter Nanostring Panel	Company	Catalog Number			
nCounter® Human Myeloid Innate Immunity v2 Panel	Nanostring	XT-CSO-HMII2-12			