Supplemental Table 1. MHC-1 and TRIM5α alleles

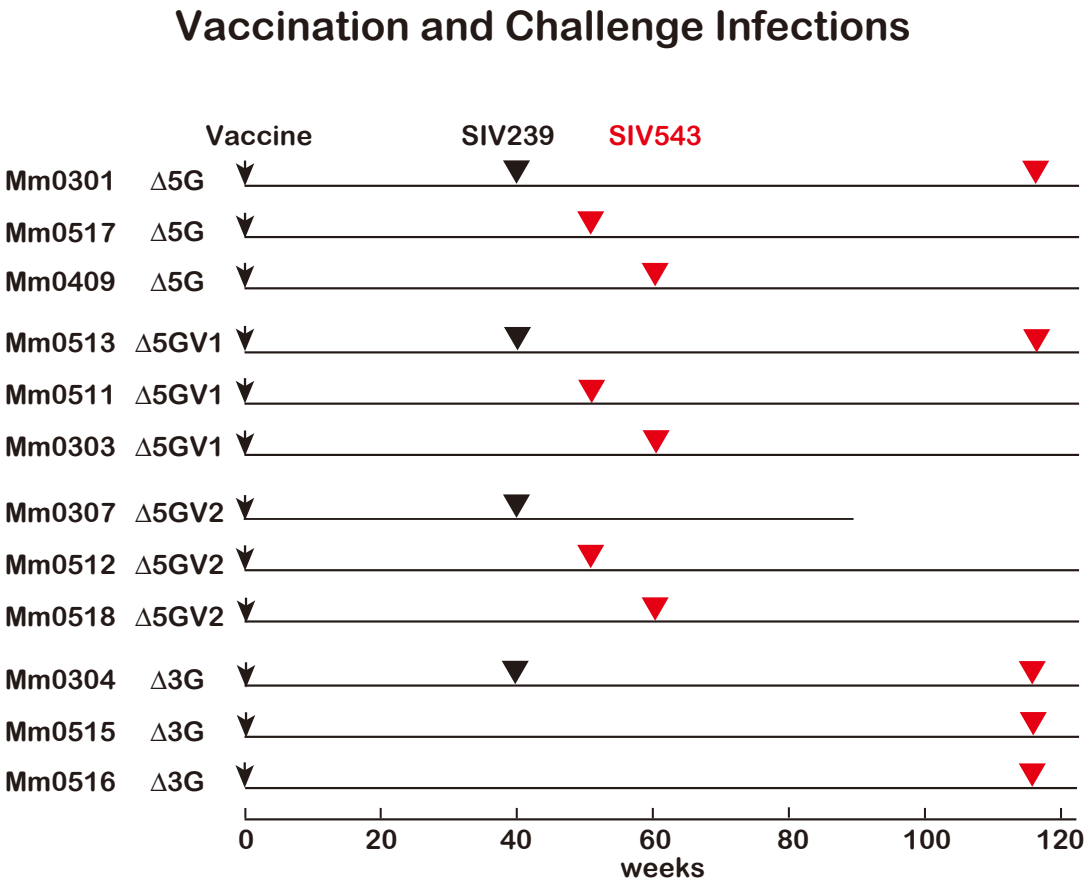
Controllers								
Animal#		Mm0301	Mm0512	Mm0517	Mm0303	Mm0515	Mm0516	Mm0511
MHC-1[1]	major A	A1*0040102	A1*0040102	A1*0040102	A1*0040102	A1*03202	A1*03202	A1*10502
		A1*11001	A1*01907	A1*05602	A1*05001	A1*11001	A1*04904	
	minor A		A2*0526		A2*0511		A1*11001	A2*0546
					A4*1403			
	major B	B*4301	B*4301	B*8201N	B*4301	B*3301N	B*3301N	B*6601
		B*9201N	B*6601	I*0106N2	B*9201N	B*0401	B*0401	B*1601N
		B*38N		B*4615N2	B*0703	B*38N		
		B*66N1			B*3901N	B*66N1		
	minor B	B*7301	B*9201N	B*0201		I*0106N3	B*6601	B*4615N1
		I*0106N6	B*2602				B*3901N	I*0106N5
								I*0106N1
TRIM5 alleles[2]		TFP/TFP	TFP/TFP	TFP/Q	TFP/TFP	Q/Cyp	TFP/TFP	TFP/TFP
		Mamu1/1	Mamu1/3	Mamu1/5	Mamu1/1	Mamu 5/7	Mamu1/1	Mamu1/3

Non-controllers									
Animal#		Mm0409	Mm0518	Mm0304	Mm0513		Mm0307		Haplotypes[1]
MHC-1[1]	major A	A1*10701	A1*560202	A1*01807	A1*01807		A1*02806		h
		A1*560202		A1*00802	A1*02603		A1*10502		g
	minor A		A2*0503	A2*0103	A2*0103		A2*0511		d
				A4*1403	A4*1403				93-06F1-2
	major B	B*1601N	B*7702	B*0101	B*0101		B*9601N		p
		B*4615N1		B*0702	B*0702		B*6601		q
		I*0106N1			I*0106N4				s
	minor B	B*02N	I*0107						
		B*6001N							
		I*0106N5							
		B*0201							
TRIM5 alleles[2]		TFP/TFP	TFP/TFP	TFP/TFP	TFP/TFP		not determined		
		Mamu3/3	Mamu1/3	Mamu3/3	Mamu3/3				

[1]MHC-1 haplotypes as reported (Naruse et al. 2010. Immunogenetics. 62:601–11)

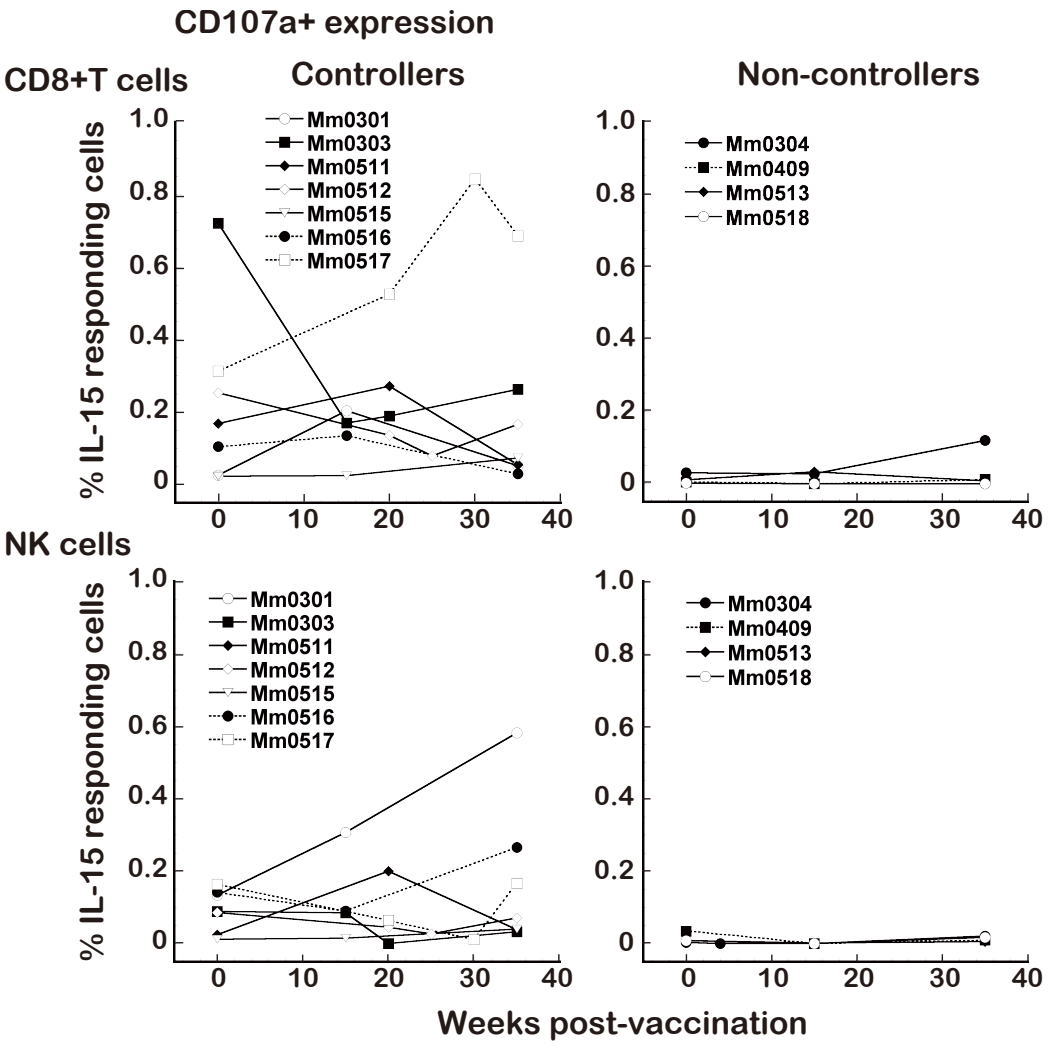
[2]TRIM5 alleles as reported (Wilson et al. 2008. J.Virol. 83:7243): Mamu1 to 3 encodes TFP; Mamu 4 to 6 encodes Q; Mamu7 encodes Cyp.

Supplemental Fig.1



Timeline of the vaccination (100 $TCID_{50}$) and challenge infection with SIVmac239 (1000 $TCID_{50}$) and SIVsmE543-3 (1000 $TCID_{50}$) are shown. The monkeys Mm0301, Mm0409, and Mm0517 were vaccinated with Δ5G, the monkeys Mm0303, Mm0511, and Mm0513 were vaccinated with Δ5GV1, the monkeys Mm0307, Mm0512, and Mm0518 were vaccinated with Δ5GV2. Mm0304, Mm0515, and Mm0516 were vaccinated with Δ3G. Four vaccinees (Mm0301, Mm0513, Mm0307, and Mm0304) were challenged with SIVmac239 at 40 weeks post-vaccination. All vaccinees (except Mm0307 who died with a cause unrelated to SIV infection), were challenged with a heterologous SIVsmE543-3. Mm0517 (Δ5G), Mm0511 (Δ5GV1), and Mm0512 (Δ5GV2) were challenged at 50 wpv; Mm0409 (Δ5G), Mm0303 (Δ5GV1), and Mm0518 (Δ5GV2) were challenged at 61 wpv; Mm0515 (Δ3G), Mm0516 (Δ3G) and three of SIVmac239-challenged animals (Mm0301, Mm0513 and Mm0304) were challenged at 117 wpv.

Supplemental Fig. 2



To see the effects of vaccination on IL-15 responding effector cells, the levels of CD107a expressing CD8+ T and NK cells in PBMCs from the vaccinees collected between pre-vac. and 35 wpv were examined by the ex-vivo assay. Whereas increases of the IL-15 responding NK cells were observed in the two vaccinees (Mm0301, Mm0516) that had NK specific responses following the challenge, the similar effect was not observed in the remaining controllers (Supplemental Fig. 3). The levels of the non-controllers were remained low at 15 wpv. Vaccination elicits vaccine specific cellular and humoral responses. However, vaccine may not influence on the levels of IL-15 responding cells because they are regulated by the innate immune cells such as monocytes and DCs (Fig.5).