

Table S1: Comparison of T and B lymphocytes subset between group of calves unvaccinated (CNT) and vaccinated with two different marker vaccines (VAX-1 and VAX-2) during the time course of vaccination (PVD).

	Group	PVD			
		0	14	20	34
		(Mean $\pm$ SEM)	(Mean $\pm$ SEM)	(Mean $\pm$ SEM)	(Mean $\pm$ SEM)
$\alpha\beta$ T lymphocytes (%)	CNT	14.51 $\pm$ 3.77	22.90 $\pm$ 3.77	15.81 $\pm$ 3.77	20.78 $\pm$ 3.77
	VAX-1	13.48 $\pm$ 4.22	24.50 $\pm$ 4.22	16.08 $\pm$ 4.22	20.45 $\pm$ 4.22
	VAX-2	15.67 $\pm$ 4.22	24.26 $\pm$ 4.22	15.32 $\pm$ 4.22	22.42 $\pm$ 4.22
$\alpha\beta$ T lymphocytes (cells/uL)	CNT	893 $\pm$ 183	945 $\pm$ 183	776 $\pm$ 183	1223 $\pm$ 183
	VAX-1	897 $\pm$ 205	1058 $\pm$ 205	990 $\pm$ 205	1401 $\pm$ 205
	VAX-2	973 $\pm$ 205	1181 $\pm$ 205	810 $\pm$ 205	1419 $\pm$ 205
$\alpha\beta$ CD4 ⁺ T (%)	CNT	75.12 $\pm$ 2.03	75.71 $\pm$ 2.03	76.74 $\pm$ 2.03	74.34 $\pm$ 2.03
	VAX-1	74.83 $\pm$ 2.27	74.70 $\pm$ 2.27	75.70 $\pm$ 2.27	77.98 $\pm$ 2.27
	VAX-2	75.60 $\pm$ 2.27	70.94 $\pm$ 2.27	74.02 $\pm$ 2.27	77.59 $\pm$ 2.27
$\alpha\beta$ CD8 ⁺ T (%)	CNT	15.62 $\pm$ 1.61	16.25 $\pm$ 1.61	14.82 $\pm$ 1.61	16.51 ^A $\pm$ 1.61
	VAX-1	16.61 $\pm$ 1.80	16.5 $\pm$ 1.80	15.13 $\pm$ 1.80	12.37 ^B $\pm$ 1.80
	VAX-2	14.31 $\pm$ 1.80	13.98 $\pm$ 1.80	15.24 $\pm$ 1.80	12.06 ^B $\pm$ 1.80
CD4/CD8	CNT	4.88 $\pm$ 1.21	4.74 $\pm$ 1.21	5.38 $\pm$ 1.21	4.73 ^b $\pm$ 1.21
	VAX-1	4.54 $\pm$ 1.36	4.9 $\pm$ 1.36	5.36 $\pm$ 1.36	8.36 ^a $\pm$ 1.36
	VAX-2	5.38 $\pm$ 1.36	5.25 $\pm$ 1.36	5.31 $\pm$ 1.36	6.56 ^a $\pm$ 1.36
$\gamma\delta$ T lymphocytes (%)	CNT	9.97 $\pm$ 3.16	16.21 $\pm$ 3.16	12.7 $\pm$ 3.16	15.62 $\pm$ 3.16
	VAX-1	8.19 $\pm$ 3.54	19.08 $\pm$ 3.54	12.97 $\pm$ 3.54	11.97 $\pm$ 3.54
	VAX-2	7.77 $\pm$ 3.54	12.76 $\pm$ 3.54	8.04 $\pm$ 3.54	9.35 $\pm$ 3.54
$\gamma\delta$ T lymphocytes (cells/uL)	CNT	749 $\pm$ 206	874 $\pm$ 206	692 $\pm$ 206	1062 $\pm$ 206
	VAX-1	563 $\pm$ 230	763 $\pm$ 230	812 $\pm$ 230	817 $\pm$ 230
	VAX-2	496 $\pm$ 230	611 $\pm$ 230	430 $\pm$ 230	613 $\pm$ 230
$\gamma\delta$ T WC1 ⁺ (%)	CNT	89.57 $\pm$ 1.32	92.65 $\pm$ 1.32	94.00 $\pm$ 1.32	94.01 ^a $\pm$ 1.32
	VAX-1	85.25 $\pm$ 1.48	90.51 $\pm$ 1.48	90.75 $\pm$ 1.48	88.62 ^b $\pm$ 1.48
	VAX-2	90.98 $\pm$ 1.48	91.44 $\pm$ 1.48	91.54 $\pm$ 1.48	90.85 ^a $\pm$ 1.48
B Lymphocytes CD21 ⁺ (%)	CNT	91.94 $\pm$ 1.59	92.82 $\pm$ 1.59	92.87 $\pm$ 1.59	93.14 $\pm$ 1.59
	VAX-1	92.61 $\pm$ 1.78	92.49 $\pm$ 1.78	89.99 $\pm$ 1.78	91.14 $\pm$ 1.78
	VAX-2	89.56 $\pm$ 1.78	90.95 $\pm$ 1.78	90.95 $\pm$ 1.78	91.54 $\pm$ 1.78
B Lymphocytes CD21 ⁻ (%)	CNT	7.78 $\pm$ 1.56	6.79 $\pm$ 1.56	6.79 $\pm$ 1.56	6.53 $\pm$ 1.56
	VAX-1	7.13 $\pm$ 1.75	7.18 $\pm$ 1.75	9.61 $\pm$ 1.75	8.31 $\pm$ 1.75
	VAX-2	10.06 $\pm$ 1.75	8.78 $\pm$ 1.75	8.80 $\pm$ 1.75	8.09 $\pm$ 1.75

a, b= significant difference between groups with $p < 0.01$ -0.001 A, B= trend of significance with $P < 0.10$.