

**Table S7.** Details of mutations identified on Tp7 antigenic epitope.

Sample group	9-mer Tp7 <sub>206-214</sub> (EFISFPISL) epitope mutation details								
	Coverage	Alt#	Alt# (F;R)	Reference	Mutation call	Reference nucleotide position	Overall mutation score	Epitope variants	Function
Nakuru cattle	17,797	-	-	TP02_0244	None	-	-	EFISFPISL	-
Mbarara cattle	20,665	-	-		None	-	-	EFISFPISL	-
Karamoja cattle	17,846	-	-		None	-	-	EFISFPISL	-
Non-clinical <i>T. parva</i> -positive cases	17,214	-	-		None	-	-	EFISFPISL	-
CD clinical cases	32,689	32,504	3515;28989		G>A	741	34.30	EFISFPISL	Synonymous

**NB:** Detail on interpretation is provided in Table S1 footnotes.