

**Table S2- Likelihood ratio tests of positive selection.**

Breaking points	Partitions (codons)	M8a	M8	2(M8-M8a)	p-value
All <i>spA</i>	1-1572 (1-525)	<b>-3798.55</b>	<b>-3765.55</b>	66	<b>&lt;0.001</b>
1	1-327 (1-109)	-571.661	-571.648	0.026	no significante
2	328-648 (110-216)	-790.111	-790.11	0.002	no significante
3	649-915 (217-305)	-535,617	-535,620	-0,006	no significante
4	916-1572 (306-525)	<b>-1784.74</b>	<b>-1768</b>	<b>33.48</b>	<b>&lt;0.001</b>

Column headings 8a7 and M8 denote the likelihood score. 2(M8-M7) denote test statistic and p-value the level of significance of the test statistic. In all *spA* and in the partition 916-1572 the Likelihood Ratio Tests indicate high probability of evolution under positive selection. p-values below 0.01 are marked in bold.