

Codon	Partition	alpha	beta	LRT	Selection detected?	dN/dS with confidence intervals
2	1	1.816	0.000	7.506	Neg. p = 0.0062	0.000(0.00- 0.09)
247	1	1.353	0.000	8.080	Neg. p = 0.0045	0.000(0.00- 0.10)
248	1	0.451	0.000	3.493	Neg. p = 0.0616	0.000(0.00- 0.29)
249	1	0.000	2.700	7.884	Pos. p = 0.0050	10000.000(7599.84-10000.00)
250	1	0.224	0.000	2.797	Neg. p = 0.0945	0.000(0.00- 0.61)

hyphy fel --alignment WestNileVirus_NS3.fas --ci Yes

Mapping substitutions with SLAC

- SLAC capable of detecting selection, is fast, but generally lacks power
- It provides a number of intuitive metrics for interpreting selection results
- SLAC recovers ancestral states and allows one to “map” evolutionary history onto a tree.

```
hyphy slac --alignment spike.fas --tree spike.tree --branches Internal
```