### S4 Table. Bayes factors (BFs) comparisons of ASF vp72-CVR genes relaxed-clock models using stepping-stone (SS) and path-sampling (PS) methods. BFs based on SS marginal likelihood estimates are on the upper off-diagonal of this table, while BFs based on PS marginal likelihood estimates are on the lower off-diagonal of this table. Best fitting model is boldfaced.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Relaxed-clock |  |  |  |  | Bayes Factor |  |  |  |  |  |
| Model | UCED+CP | UCED+EG | UCED+EGx | UCED+LG | UCED+GMRF | UCLN+CP | UCLN+EG | UCLN+EGx | UCLN+LG | UCLN+GMRF |
| UCEDa+CPb | –– | -208.59 | -182.97 | 509.75 | 193.6125 | 3.62 | 0.08 | -3.89 | 487.2 | 67.53 |
| **UCED+EGc** | **15.9** | **––** | **25.62** | **718.34** | **402.2025** | **212.21** | **208.67** | **204.7** | **695.79** | **276.12** |
| UCED+EGxd | 17.6 | 1.7 | –– | 692.72 | 376.5825 | 186.59 | 183.05 | 179.08 | 670.17 | 250.5 |
| UCED+LGe | -284.2 | -300.1 | -301.8 | –– | -316.1375 | -506.13 | -509.67 | -513.64 | -22.55 | -442.22 |
| UCED+BSgf\* | -215.33 | -231.23 | -232.93 | 68.87 | –– | -189.9925 | -193.5325 | -197.5025 | 293.5875 | -126.0825 |
| UCLNg+CP | -0.7 | -16.6 | -18.3 | 283.5 | 214.63 | –– | -3.54 | -7.51 | 483.58 | 63.91 |
| UCLN+EG | 10.5 | -5.4 | -7.1 | 294.7 | 225.83 | 11.2 | –– | -3.97 | 487.12 | 67.45 |
| UCLN+EGx | 5.5 | -12.1 | -12.1 | 289.7 | 220.83 | 6.2 | -5 | –– | 491.09 | 71.42 |
| UCLN+LG | -388.55 | -104.35 | -406.15 | -104.35 | -173.22 | -387.85 | -399.05 | -394.05 | –– | -419.67 |
| UCLN+\*BSg | -20.5 | 194.83 | -38.1 | 263.7 | 194.83 | -19.8 | -31 | -26 | 368.05 | –– |

aUncorrelated relaxed clock with exponential distribution

bConstant population size coalescent model

cExpansion population size coalescent model

dExponential population size coalescent model

eLogistic population size coalescent model

fBayesian Skygrid coalescent model

gUncorrelated relaxed clock with log-normal distribution

\*non-parameteric demographic model