

Table A – Comparison of *gmos* to *ClonalOrigin*

	gmos			ClonalOrigin			
<i>s</i>	<i>TPR</i> [%]	<i>FPR</i> [%]	<i>t</i> [s]	<i>TPR</i> [%]	<i>FPR</i> [%]	<i>Number of detected RE</i>	<i>t</i> [s]
0.001	56.73	19.71	0.03	17.68	5.56	1.20	1861.55
0.0025	67.07	9.38	0.03	58.48	7.78	1.90	1941.84
0.005	85.63	11.30	0.02	90.36	6.03	2.10	1884.47
0.01	83.50	10.00	0.02	91.78	5.04	2.00	2581.88
0.025	82.42	6.90	0.02	98.37	11.24	2.80	3924.46
0.05	94.59	5.18	0.02	44.90	17.90	9.50	12231.2
0.1	94.42	1.64	0.03	*			
0.11	92.63	2.82	0.04	*			

Comparison of *gmos* to *ClonalOrigin* on simulated data sets, where each data set includes a recombinant query sequence, whose genealogy is shown in Fig 3 (see text for the details). The parameters *TPR* (the true positive rate), *FPR* (the false positive rate), *Number of detected RE* (the number of recombination events detected by *ClonalOrigin*) and *t* (the running-time measured in seconds) were calculated for each value of *s* (the evolutionary distance calculated as the relative number of segregating sites; Fig 3). The parameters' values were computed as the average over 10 data sets. In case of *ClonalOrigin*, *TPR* and *FPR* were measured for the recombination events, where S_2 was the donor sequence and the query was the recipient: *TPR* is the fraction of query positions correctly detected to be horizontally transferred from the sequence S_2 and *FPR* is the fraction of query positions incorrectly detected to be horizontally transferred from the sequence S_2 . In case of *gmos*, *TPR* and *FPR* were measured for query positions assigned to S_2 , where S_2 was detected as the best hit: *TPR* is the fraction of query positions correctly assigned to be most closely-related to S_2 and *FPR* is the fraction of query positions incorrectly assigned to be most-closely related to S_2 .

*Due to decrease in performances and expensive computation, *ClonalOrigin* was not tested for $s \geq 0.1$. The rows with bolded values represent the best scores for *gmos* ($s=0.1$) and *ClonalOrigin* ($s=0.01$), respectively.