

**Supplementary Table 1.** P-values (extended binomial) and posterior quantiles (CI coverage) for a renaissance counting false positive rate of 0.1.

Taxa	EBin P-value	posterior quantile
<b>16</b>	0.50	0.86
<b>32</b>	0.36	0.94
<b>64</b>	0.31	0.90
<b>128</b>	0.26	0.93