

Table S13. Empirical false positive rate. Mutation model with jumps of size 2.

Varying probability p for a step of size 2. With probability $1 - p$ the step size is 1. Significance levels α are based on theoretical formulae according to eqs (7) and (8).

p	$\alpha = 0.01$			$\alpha = 0.05$			SKD*
	$T_2^{(\text{sum})}$	$T_2^{(\text{product})}$	$T_0^{(\text{dist})}$	$T_2^{(\text{sum})}$	$T_2^{(\text{product})}$	$T_0^{(\text{dist})}$	
0.0010	0.00031	0.0004	0.00608	0.00938	0.00683	0.02684	0.05516
0.0020	0.00049	0.0004	0.00613	0.00935	0.00673	0.02634	0.05400
0.0050	0.00045	0.0003	0.00668	0.00905	0.00715	0.02849	0.05555
0.01	0.00048	0.00042	0.00571	0.00913	0.0068	0.02661	0.05613
0.02	0.00032	0.00032	0.00615	0.00898	0.00686	0.02739	0.05829
0.05	0.00034	0.0004	0.00626	0.00939	0.00692	0.02727	0.06330
0.1	0.0004	0.00037	0.00578	0.00911	0.00689	0.02799	0.06949
0.2	0.00034	0.0004	0.00636	0.00962	0.00718	0.02906	0.08212
0.5	0.00039	0.00049	0.00706	0.00881	0.00752	0.03051	0.10526
1.0	0.00042	0.00033	0.00573	0.00919	0.00667	0.02786	0.05468

* SKD-test from [37]