

Supplementary Table 1

NMI	CoSTA		SpatialDE	
noise level (variance)	True data	Shuffled data	True data	Shuffled data
0.2	0.97	0.89	1	0.86
0.3	0.98	0.87	0.99	0.99
0.4	0.96	0.8	0.99	0.99
0.5	0.85	0.66	0.98	0.98
0.6	0.52 0.91	0.32	0.97	0.97