countH_Pseudo_Perm: The Hotelling's T^2 with pseudo inverse of correlation matrix and permutation p-value.
countG: The global test.
countG_Perm: The global test with permutation p-value.
countGlobalAncova: The global ANCOVA test with permutation p-value.
countN_Perm: The energy test(N-statistic) with permutation p-value.
countGSEA_Category: The GSEA-like test(in Category package) with permutation p-value.

Mixture of Normal with different mean setting(0, 2)
using fixed mean difference

	countH_Pseudo_Perm	countG	countG_Perm	countGlobalAncova	countN_Perm	countGSEA_Category
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:0.1	0.056	0.07	0.066	0.061	0.075	0.074
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:0.3	0.077	0.137	0.132	0.129	0.114	0.138
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:0.5	0.117	0.298	0.289	0.272	0.241	0.287
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:0.7	0.193	0.497	0.491	0.474	0.44	0.483
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:0.9	0.314	0.706	0.692	0.675	0.65	0.713
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:1	0.391	0.804	0.804	0.783	0.747	0.793
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:50,difference:2	0.985	0.999	0.999	0.999	0.999	0.999
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:0.1	0.065	0.077	0.072	0.066	0.076	0.075
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:0.3	0.09	0.195	0.19	0.172	0.159	0.19
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:0.5	0.146	0.379	0.369	0.356	0.331	0.378
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:0.7	0.232	0.642	0.63	0.614	0.576	0.641
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:0.9	0.39	0.856	0.849	0.84	0.82	0.854
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:1	0.463	0.917	0.915	0.905	0.896	0.914
composition:0.5 0.5 ,rho:0.1 0.9 ,probes:30,size:70,difference:2	0.997	1	1	1	1	1