

Table 4. Phenotypic distribution of a simulated full-sib family from crossing two autotetraploid genotypes AA/BB/BB/OB and CA/DA/EC/EO under quadrivalent pairing model. The phenotype codes represent the presence ("1") or the absence ("0") of an allele in individual genotype, and different alleles are separated by their presence in the code sequence.

P ₁	11000000	11000000	nc(i,3,k,l)														f_i ($\alpha = 0.1, r = 0.1$)	
			$k = 0, l = 0, 1, \dots, 4$						$k = 1, l = 0, 1, \dots, 4$				$k = 2, l = 0, 1, \dots, 4$					
1	11101000	11000000	648	2592	3672	2496	672	0	0	0	0	0	0	0	0	0	0	0.0449
2	01101000	11100000	972	2592	3348	2304	624	972	2592	3348	2304	624	0	0	0	0	0	0.0660
3	01110000	11000000	972	3240	3780	1872	336	972	3240	3780	1872	336	0	0	0	0	0	0.0699
4	11100000	11100000	0	0	0	0	0	0	648	1620	1224	324	0	0	0	0	0	0.0005
5	01011000	11000000	972	3888	5940	3888	912	972	3888	5940	3888	912	0	0	0	0	0	0.0751
6	11001000	11100000	648	1080	1296	792	168	972	3240	3888	2520	468	0	0	0	0	0	0.0428
7	11011000	11000000	648	2592	3672	2496	672	0	0	0	0	0	0	0	0	0	0	0.0449
8	01001000	01100000	972	1620	972	288	48	2430	5508	4374	1368	120	1458	3888	3402	1080	72	0.0698
9	10110000	11000000	324	972	1188	636	120	0	972	1782	1080	162	0	0	0	0	0	0.0211
10	11011000	11100000	648	2160	2376	1392	432	0	0	0	0	0	0	0	0	0	0	0.0419
11	11110000	11000000	648	1944	2376	1272	240	0	0	0	0	0	0	0	0	0	0	0.0408
12	10011000	11000000	324	1296	1836	1248	336	0	972	2754	2052	486	0	0	0	0	0	0.0232
13	01001000	11100000	0	1296	2160	1224	240	0	4212	8640	5220	888	0	2916	6480	3996	648	0.0110
14	01011000	11100000	972	2592	3348	2304	624	972	2592	3348	2304	624	0	0	0	0	0	0.0660
15	01101000	11000000	972	3888	5940	3888	912	972	3888	5940	3888	912	0	0	0	0	0	0.0751
16	01011000	01100000	0	972	1620	864	144	0	972	1620	864	144	0	0	0	0	0	0.0065
17	01101000	01100000	0	972	1620	864	144	0	972	1620	864	144	0	0	0	0	0	0.0065
18	11101000	11100000	648	2160	2376	1392	432	0	0	0	0	0	0	0	0	0	0	0.0419
19	00101000	11100000	0	0	0	0	0	486	1296	1674	1152	312	0	0	0	0	0	0.0033
20	10101000	11100000	324	1080	1188	696	216	0	972	2106	1188	270	0	0	0	0	0	0.0216
21	00001000	01100000	0	0	0	0	0	486	810	486	144	24	729	1944	1701	540	36	0.0035
22	01100000	11000000	0	0	0	0	0	1458	4860	5670	2808	504	1458	4860	5670	2808	504	0.0117
23	01001000	01000000	0	324	432	144	0	1458	2268	1242	360	72	1458	1944	810	216	72	0.0116
24	00011000	11100000	0	0	0	0	0	486	1296	1674	1152	312	0	0	0	0	0	0.0033
25	10011000	11100000	324	1080	1188	696	216	0	972	2106	1188	270	0	0	0	0	0	0.0216
26	11001000	01100000	0	648	648	216	48	0	972	1944	972	72	0	0	0	0	0	0.0043
27	11011000	01100000	0	0	648	648	144	0	0	0	0	0	0	0	0	0	0	0.0004
28	10010000	11000000	0	0	0	0	0	486	1458	1782	954	180	0	1458	2673	1620	243	0.0035
29	10101000	11000000	324	1296	1836	1248	336	0	972	2754	2052	486	0	0	0	0	0	0.0232
30	11101000	10100000	0	216	360	192	0	0	0	0	0	0	0	0	0	0	0	0.0013
31	11011000	01000000	0	0	216	216	48	0	0	0	0	0	0	0	0	0	0	0.0001
32	01001000	11000000	0	648	2160	2016	576	0	3564	8640	7740	2376	0	2916	6480	5724	800	0.0075
33	10001000	11100000	324	540	648	396	84	486	2592	2916	1908	342	0	1458	3888	1782	324	0.0221
34	10101000	10000000	0	108	252	120	0	486	1134	540	0	0	0	0	0	0	0	0.0038
35	01110000	11100000	0	648	1512	1224	336	0	648	1512	1224	336	0	0	0	0	0	0.0047
36	10100000	11000000	0	0	0	0	0	486	1458	1782	954	180	0	1458	2673	1620	243	0.0035
37	01010000	11000000	0	0	0	0	0	1458	4860	5670	2808	504	1458	4860	5670	2808	504	0.0117
38	11001000	11000000	0	648	1296	1224	432	972	1944	3888	3528	1332	0	0	0	0	0	0.0104
39	10110000	10000000	0	108	144	48	0	486	648	216	0	0	0	0	0	0	0	0.0035
40	01011000	01000000	0	324	540	288	48	0	324	540	288	48	0	0	0	0	0	0.0022
41	00001000	01000000	0	0	0	0	0	0	162	216	72	0	729	972	405	108	36	0.0006